COMPUTER ABSTRACTS

VOLUME 21

1977

TECHNICAL INFORMATION COMPANY
P.O. BOX 59 · ST. HELIER
JERSEY . BRITISH CHANNEL ISLANDS

CLASSIFICATION SCHEME

Since the bulk of computer literature is concerned with digital computers, most sections of the classification relate wholly or primarily to various aspects of digital computers. However, for the benefit of readers chiefly interested in analogue computers, *all* material relating to such computers is classified in a single section (Section 15). Similarly, another section (Section 16) is devoted to *all* material relating to hybrid computers (and other computers not wholly analogue or wholly digital).

Applications of computers are classified in a special section (Section 18) subdivided into specific areas of application. Where appropriate, cross-references to this section are included in Sections 15 and 16.

Books (as opposed to articles and papers in periodical literature, reports and patents) are to be found in the final section (Section 19), but are appropriately cross-referenced in other sections.

The headings of the nineteen sections into which abstracts are classified are listed below with, for each section a description of its scope and/or examples of subject matter included in it. In addition references are given to other sections related in some respect to a particular section.

1 GENERAL. Covers matters of general interest and/or not falling within the scope of any other section. Includes:—State-of-the-art reviews; Directories and other reference material; General bibliographies; Terminology; Standardisation; Legal aspects of computers; Computer associations; Computing services; Economics of computer use; Marketing of computers; Computer selection; Planning, organisation, management, etc., of computer installations.

2 COMPUTER THEORY. Includes:—Automata theory; Formal languages (other than specific programming languages, for which see Section 8). Refer also to Section 3.

3 LOGICAL DESIGN. Covers the design of computer logic, unrelated to specific physical circuits or devices (for which see Section 10). Refer also to Sections 2 and 9.

4 ARTIFICIAL INTELLIGENCE. Includes:—Learning machines; Self-organising systems; Neuron analogues; Perceptrons; Simulation of human thinking.

5 PATTERN RECOGNITION. Includes:—Character recognition; Speech recognition; Pictorial features recognition.

6 MATHEMATICS. Covers all material having a high mathematical content. Refer also to Section 7.

7 TECHNIQUES. Includes:—Algorithms; Programs; Arithmetic operations; Arithmetic systems (such as interval arithmetic, residue arithmetic, etc.); Radix conversion; Sorting; Time-sharing. Refer also to Sections 6 and 8.

8 PROGRAMMING. Includes:—Languages; Operating systems; General programming techniques (but for specific production programs, see Section 7).

9 SYSTEM DESIGN. Covers the overall design, organisation and construction of digital computers, major parts thereof (e.g., arithmetic and control units), and multiple computer systems. Includes:—Application of digital computers in the design and production of digital computers. Refer also to Sections 2, 3 and 14.

10 DIGITAL CIRCUITS AND COMPONENTS. Includes:—Circuits and components for performing logic functions; Bistable and multistable circuits; Counters; Accumulators; Shift registers; Code converters; Adders; Subtractors; Multipliers; Dividers. Refer also to Section 11.

11 DATA STORAGE. Includes:—Memory elements; Memory matrices; Associative (content-addressable) memories; Permanent stores; Semi-permanent (read-only) stores; Magnetic recording (tape, drum, disc, card). Refer also to Section 12.

12 INPUT/OUTPUT. Covers peripheral equipment, its connection to and control by digital computers, and input/output techniques. Includes:—Punched tape; Punched cards; Printers; Display systems and devices; Speech output devices; Analogue/digital converters. Refer also to Sections 5, 11 and 13.

13 DATA TRANSMISSION. Includes:—Data acquisition and collection. Refer also to Section 12.

14 SPECIFIC DIGITAL COMPUTERS. Covers material relating to specific digital computer models (hardware and software). Includes:—Surveys of digital computer characteristics. Refer also to Section 9.

15 ANALOGUE COMPUTERS. Covers all material relating to analogue computers, and their components, analogue computing techniques, etc. Includes:—Applications of analogue computers (normally by cross-reference to Section 18).

16 HYBRID AND OTHER COMPUTERS. Covers all material relating to hybrid computers (and all other computers not wholly analogue or wholly digital), their components, hybrid computing techniques, etc. Includes:—Digital differential analysers; Applications of hybrid and other computers (normally by cross-reference to Section 18).

17 EDUCATION AND PERSONNEL. Includes:—Computer science education; Instructional aids; Films; Computer personnel recruitment, selection, training, etc.; Displacement of personnel and unemployment arising from the use of computers. Does *not* include educational applications of computers, for which see Section 18 (Education sub-heading).

18 APPLICATIONS. Differs from other Sections in that abstracts are further classified under sub-headings (in alphabetical order) for various specific areas of application (together with a final Miscellaneous sub-heading). The Contents page opposite includes a complete list of these sub-headings. Refer also to Sections 6, 7 and 8.

19 BOOKS. Includes:—Conference proceedings and the like.

CONTENTS

1 GENERAL 1 23 45 67 87 115 136 158 182 201 222 247
2 COMPUTER THEORY 2 24 45 67 88 115 137 158 183 202 222 248
3 LOGICAL DESIGN 2 25 46 68 89 117 137 159 183 203 226 251
4 ARTIFICIAL INTELLIGENCE 3 25 46 68 89 117 138 160 184 203 226 252
5 PATTERN RECOGNITION 3 26 46 69 89 117 138 161 184 203 227 252
6 MATHEMATICS 4 26 47 70 91 119 139 162 185 204 228 253
7 TECHNIQUES 7 29 50 71 93 121 140 165 187 205 230 254
8 PROGRAMMING 10 31 53 73 97 125 146 167 190 208 232 257
9 SYSTEM DESIGN 12 35 55 76 100 128 149 171 193 212 236 260
10 DIGITAL CIRCUITS AND COMPONENTS 12 36 56 77 102 129 150 172 194 213 236 262
11 DATA STORAGE 13 36 56 77 102 129 150 173 194 213 237 262
12 INPUT/OUTPUT 13 36 56 77 103 129 150 173 195 213 237 263
13 DATA TRANSMISSION 14 36 57 78 103 130 151 173 195 213 237 264
14 SPECIFIC DIGITAL COMPUTERS 14 37 57 78 104 130 151 174 195 214 237 264
15 ANALOGUE COMPUTERS 14 37 57 78 105 130 151 174 196 214 238 264
16 HYBRID AND OTHER COMPUTERS 14 37 57 78 105 131 151 174 196 215 238 264
17 EDUCATION AND PERSONNEL 14 37 58 79 105 131 151 174 196 215 238 264
18 APPLICATIONS
- Aerospace 14 37 58 79 105 131 151 174 196 215 238 265
- Business 15 37 58 79 105 131 151 174 196 215 238 265
- Chemical 15 38 59 81 107 131 152 175 197 215 239 266
- Communications 15 38 59 82 107 152 175 197 216 239 266
- Control—General Systems 16 38 60 107 132 176 239 266
- Control—Machine Tool 16 152 216 266
- Control—Production and Process 39 60 82 107 176 197 216 240
- Education 16 39 60 82 108 132 152 176 197 216 240 266
- Electronics 39 82 152 177 197 217 240 266
- Engineering, Civil 60 108 132 152 240 267
- Engineering, Electrical 16 39 108 132 153 177 197 240 267
- Engineering, Mechanical 16 39 132 153 177 217 241 267
- Engineering, Structural 17 60 82 108 153 177 198 241 268
- Information Retrieval 17 39 62 82 109 132 153 177 198 218 241 268
- Linguistics 17 62 109 132 177 198 218 242
- Medical 18 40 62 82 109 133 153 177 198 218 242 268
- Meteorology 18 63 82 133 155 178 198 219 242
- Military 19 41 63 83 110 133 155 178 198 219 242 269
- Mining 19 199 243
- Nuclear 20 42 63 110 133 219 243 269
- Physics 20 42 63 83 110 133 156 179 199 219 243 270
- Transport 21 43 64 84 111 134 156 179 199 220 243 270
- Miscellaneous 21 43 65 85 111 134 156 180 199 220 243 270

19 BOOKS 22 43 66 85 113 135 157 180 200 221 245 270

SUBJECT INDEX 273

AUTHOR INDEX 293

PATENT INDEX 306

LIST OF PERIODICALS ABSTRACTED 307

Abstracts are provided for four main types of items:

(1) Articles and papers in periodicals, conference proceedings, etc.
(2) U.S. Government Reports
(3) Patents
(4) Books

Abstracts of the first three types are arranged in the above order within each classified section of *Computer Abstracts*; book abstracts appear in a final section.

The publishers cannot supply copies of items abstracted, but will provide information if subscribers have difficulty in locating a source for any particular item. In most cases, however, the following notes should enable sources to be identified:—

Articles and papers. Titles of periodicals and other publications are generally abbreviated, but full titles and publishers are listed in the annual index. In the case of papers from proceedings of conferences and the like, full bibliographical details of the proceedings will normally be found in the Books section. A large proportion of the periodicals and other publications should be available in any good general technical library.

U.S. Government Reports. These reports relating to U.S. Government-sponsored research and development are mostly identified by AD, COM or PB serial numbers, Most reports are available from the National Technical Information Service, Springfield, Virginia 22151, U.S.A. Reports should be ordered by the serial number printed in italics in the abstract (*not* by the *Computer Abstracts* reference number). The price of a report depends on its length, on whether it is required in paper copy or microfiche form, and on whether the order originates in North America or elsewhere. In addition, prices are fixed for only a limited period of time. It is not therefore possible to quote a meaningful price in an abstract, and information about the price of any particular report should be requested from the National Technical Information Service.

Patents. British patent specifications are identified by *B.P.* followed by the serial number of the patent. They can be obtained at The Patent Office, 25 Southampton Buildings, London, WC2A 1AY or by post from The Patent Office, Orpington, Kent BR5 3RD; in either case the price of a patent specification is 75p. U.S.A. patent specifications are identified by *U.S.P.* followed by the serial number of the patent; they can be ordered from the Commissioner of Patents, Washington, D.C. 20231, U.S.A., and cost 50 cents each.

COMPUTER ABSTRACTS

VOLUME 21, 1977

SUBJECT INDEX

AUTHOR INDEX

PATENT INDEX

LIST OF PERIODICALS ABSTRACTED

TECHNICAL INFORMATION COMPANY
P.O. BOX 59 · ST. HELIER
JERSEY · BRITISH CHANNEL ISLANDS

SUBJECT INDEX

Entries are in alphabetical order by word (e.g. 'Air traffic control' is before 'Airborne computers'). Abstracts of patents and books are indicated respectively by (P) and (B) after the reference numbers.

ounting
ounts payable system, **3374**
also Auditing; Banking; Costing
ustics: electroacoustic transducer simulation, **767**
ge AGT 30 digital computer
lied to hidden-line drawing production, **2079**
vision camera buffer system, **3032**
lers
ary-coded decimal, **470**(P)
ploying
ntegrated injection logic, **3331**
ipeline arrays, **170**
-around-carry, **1594**
ltivalued, **3331**
ative binary, **576**
onautics
odynamic calculations, **201, 753, 3369**
craft
rash data recorder, **2715**
isplays, **1628, 1683**
mergency evacuation simulation, **2180**
xhaust plume flow prediction, **754**
atigue data acquisition, **1017**
racture mechanics analysis, **1014**
elicopter
design and performance estimation, **3047**
stability evaluation, **753**
ydraulic system analysis, **2744** to **2751**
oise reduction, **749, 750, 751**
uclear blast response calculations, **490, 491**
/STOL stability and control analysis, **2465, 2466**
onics, **1627**
rogramming language, **2468**
loons: tethered system design **1891**
th resource survey aircraft routing, **1890**
ht control, microprocessor for, **202**
ht simulation, **1315**
elicopters, **203, 204, 205**
emotely piloted vehicle, **206, 492**
ding system, **1314**
imulation of, **2463**
ectory generation, **207, 1015, 1016, 1892**
d tunnel calculations, analogue computer for, **1008**
also Air traffic control; Airborne computers
riculture: irrigation, **2787**
traffic control
craft identification, **580**
tral flow control system, **815, 816, 817, 818, 820, 1079**
mmunications simulation, **2191**
ding system, **1314**
minal air traffic control, **1376**
borne computers
opilot microprocesser, **202**
liography, **1889**
roprogrammed, **2462**
GOL
GOL60
nodified, **140**
irtual memory requirements, **696**
GOL 68, **1951**(B)
ALGOL 68–R for systems implementation, **2396**
or literary data processing, **826, 1670**
emantics, **3274**
orithms (in ALGOL)
a ratio, incomplete, **1786**
ve fitting, **2331**
a blocks interchange, **1787**
rpolation, quintic natural spline, **1748**
place transform inversion, **1794**
gendre functions, **2353**
gnetic tape file block size optimisation, **894**
trices, **904**
lecomposition of symmetric, **383**
QR factorisation, **109**
ity testing table generation, **2581**
RT, **2955**
face drawing, **2599**

ALPHARD programming language, abstraction and verification in, **1850**
iteration, **703, 2619**
symbol table mechanism, **1851, 2400**
tree manipulation, **1849**
Amateur computers, ways of building, **1098**
Analogue computers
for on-line wind tunnel data reduction, **1008**
for transistor circuit simulation, **3036**
optical, **1004**
power supply system, **2712**(P)
Analogue computing elements
signal ratio to frequency converter, **2172**(P)
see also Function generators; Multipliers
Analogue computing techniques
programming, minimisation of inverters in, **745**
quadratic factor finding, **2170**
system identification, **2171**
AN/GYK–21(V) digital computer programming, **2710**
AN/UYK–7 digital computer emulation on Burroughs D-Machine, **1857**
AN/UYK–20 digital computer emulation on Burroughs D-Machine, **2708**
APL programming language, **1676**(B)
APL machine emulation, **1885**
APL system on small computer, **2084**
parsing, **1824**
Approximation
analytic functions, periodic, **2025**
Chebyshev, **71, 344, 384, 628, 2036**
L_1, **2015, 2309**
L_2, **47, 1171, 3211**
L_p, **2074**
minimax, nonlinear, **1732**
Pade, **2982**
piecewise linear, **1751, 3198**
piecewise polynomial, **874**
polyhedral norms, **2309, 2310**
random functions, **875**
rational, **618, 628, 635, 2304, 2561, 2573**
spline, **128**
Arbiter, 1286
Archaeology, 2244, 2501
Architecture, 1387
bibliography, **1683, 1684**
Array computers, 2666, 2667, 2669
Array processing, 893
Art, 1383, 2786, 3432
sculptured figures analysis, **2790**
teaching, **1341**
Artificial intelligence, 2254(B)
adaptive information processing system, **3193**(P)
adaptive threshold logic, **579**
applied to
archaeology, **2244**
education, **2204**
computer-assisted instruction, **2202, 2203, 3062**
bibliography, **1355, 1356**
comprehension, **857, 1989**
cooperative computation, **328**
goals, simultaneous achievement of several, **1981**
inference systems, **1129**
inductive, **1994, 1997**
knowledge acquisition, **30**
natural language understanding, **1996, 2011, 2882**
neuron-like networks, **329**
production systems, **1438, 1990, 2011, 3181**
program understanding, **1987**
programming languages, **1992, 1993, 2001**
self-organising systems, **327**
story writing, **858**
see also Bionics; Cybernetics; Decision-making; Games; Heuristics; Learning; Picture processing; Problem solving; Puzzles; Question-answering systems; Robots; Theorem proving.
Assemblers, 1232
code generator, **2083**
cross assemblers, **1251, 2984**
Assignment problems, 1805, 1816
Associative memory, 986(P), **2436, 3346**(P)

Associative memory—*cont.*
employing
holographic storage, **728**
transistors, **475**(P)
hardware and software memories compared, **1760**
multiple response resolution, **1601**
Associative processors, 1867, 2142(P)
for data base management, **1283, 2670**
for data transmission frame synchronisation, **1303**
linear array processor, **1260**
multiassociative processor, **2669**
Astronautics
bibliography, **2178, 2179**
programming, **444, 3372**
reentry vehicles, **755, 1333, 3046**
satellite orbit determination, **752, 2464, 2467**
space shuttles, **3371**
see also Missiles; Rocket engines; Spaceborne computers
Asynchronous logic, 3184
Auditing, 495, 496, 497
Austria: computer market, **302**
Automata, 3126(B), **3435**(B)
amalgamation of, **2350**
bibliography, **575**
decomposition, **2273**
derivation languages of, **3140**
feedback automata, **2829**
flow table construction, **17**
fuzzy automata, **2824**
labyrinths, automata in, **2814, 2827**
learning automata, **29**
linear realisability, **847, 1692, 1697**
mappings of, **2864**
Mealy and Moore types, equivalence of, **844**
probabilistic automata, **15, 3149, 3170**
pushdown automata, **1689, 1690**
relational automata, **2861**
state assignments, **573**
stochastic automata, **1695, 2850, 2866**
topological machines, **850**
tours in sequential machines, **311**
tree automata, **1123, 2873**
Turing machines, **309, 2868**
multihead, **3154**
multitape, **1424**
reversal bounded, **3145**
space complexity classes, **846, 849**

B

Banking
cheque/deposit slip character recognition, **759**
electronic funds transfer, **1317, 1320, 1325, 3378**
BASIC programming language, **2803**(B), **3436**(B)
graphics extension, **3004**
hybrid computing modification, **3037**
laboratory system, **2642**
self-modifying program, **132**
SEMANOL specification of, **3296, 3297**
Belguim, interregional input-output tables construction for, **1036**
Bessel functions, 2048, 2053
analogue computer generation of, **1623**
factorial and Hadamard series for, **1814**
modified, incomplete, **2929**
second kind, real fractional, **2938**
spherical, **2920**
Beta ratio, incomplete, **1786**
Bibliographies
automata, **575**
avionics, **1889**
bionics, **2545**
character recognition, **1718, 1719**
computer aided design, **3404**
computer aided instruction, **3389**
computer assisted counseling and guidance, **2738**
computer networks, **712**
computer performance evaluation, **570**
computer science education, **748**
computer technology trends, **307**
data base systems, **378, 2363, 2364**
data compression, **1212, 1213**
data storage
optical, **1879**
random access, **981, 982**
Bibliographies—*cont.*
read-only, **730**
semiconductor, **2150**
differential equations
nonlinear, **889**
partial, **372**
distributed data processing, **3255, 3256**
graphics, interactive, **1683, 1684**
information retrieval, **519**
information sciences
analogue data processing, **1353**
computer components, **790**
computer systems, **2213**
on-line systems, **230**
programming languages, **517**
real-time computers, **518**
time-sharing, **231**
linguistics, **795**
logic design, **1126**
magnetic bubble domains, **473**
management information systems, **498**
mechanical translation, **3082**
medicine, **3419**
computerised axial tomography, **1933, 1934**
microcomputers, **2675, 2676**
communication applications, **2728**
general applications, **2799**
minicomputers, **9**
mining: coal mine structures analysis and design, **258**
missiles, **2178, 2179**
natural language processing, **1355, 1356**
parallel processors, **1585, 1586**
PERT, **3052**
printers, **997**
programming
automatic, **442**
languages
design, **451**
FORTRAN, **2107**
maintenance, **2404**
numerical software, **2604**
portability, **2975**
reliability, **3283**
standards, **2654**
structured, **3302**
security, **3127, 3128**
shift registers, **979**
simulators, **565**
spacecraft, **2178, 2179**
symbolic manipulation, **1738**
text editing, **2795**
thesauri, **1678**(B)
Biharmonic equation, 105
Biology, 1165
Bionics: bibliography, **2545**
Bistable circuits, 723(P), **725**(P)
Boolean algebra
base –2 logic, **576**
functions
complexity of, **2821, 2876**
depth of, **1975**
software evaluation of, **2346**
parallel evaluation, **325**
prime implicant determination, **23**
Boundary value problems
elliptic, **884, 1162, 1740, 2031, 2305, 2900, 2918, 3210**
fast methods, **1737**
hyperbolic, **63, 65, 879, 3210**
multilevel adaptive solutions, **2317**
ordinary differential equations, **2042**
nonlinear, **347**
stiff, **1167**
parabolic, **51, 65**
two-point, **367, 881, 1155, 1464, 1474, 1500, 2039, 2566**
nonlinear, **1486, 1490, 1491, 2575**
second order, **352, 1465**
Buffer memory, 465(P), **3348**(P)
Burroughs 5700 digital computer applied to sorting, **2354**
Burroughs 6700 digital computer
applied to matrix decomposition, **383**
programming: COBOL, **1854**
resource allocation, **1578**
Burroughs 7700 digital computer programming: COBOL, **1854**
Burroughs D-Machine digital computer emulation of
AN/UYK–7, **1857**
AN/UYK–20, **2708**

nada: input-output model of national economy, **1031**
rtography
liography, **1683, 1684**
logic maps of mining areas, **257**
nner digitised mapping data conversion to polygon format, **2797**
nbol data processing, **1947, 1948**
C 1700 digital computer applied to video image processing, **215**
C 3500 digital computer applied to
art stress and strain analysis, **2219**
eo image processing, **215**
C 3600 digital computer linkage to CDC CYBER 76, **740**
C 6000 series digital computers
plied to
helicopter simulation, **205**
non-symmetric banded matrices, **400**
structural analysis, **227**
surface fitting and mapping, **2509**
ating-point half-word packing, **1306**
ogramming
operating system, **3362**
PASCAL, **2651**
C 6400 digital computer
plied to
matrix decomposition, **383**
nonlinear resistive network analysis, **3394**
radar scene simulation, **1399, 1401**
statistical computation, **2930**
stereo image processing, **1400**
time series analysis, **2617**
university examination procedure rationalisation, **2476**
ogramming
compiler diagnostic messages compaction, **1223**
PASCAL, **2377**
program verification, **3292**
C 6500 digital computer
plied to
boundary value problems, **352**
irregular planar solids properties calculation, **226**
aphical output system, **733**
C 6600 digital computer
plied to
approximation in L_1 norm, **2015**
Bessel functions, **2048, 2053**
boundary value problems, **914**
contour plotting, **3257**
eigenvalue problems, **2616**
hidden-line drawing production, **2079**
information retreival, **2484**
initial value problems, **124**
optimisation, **3259**
vehicle/pedestrian crash analysis, **3431**
aphics display, **916**
C 6700 digital computer
plied to satellite orbit determination, **752, 2467**
ogramming
data base management, **121, 2362**
executive system, **1855**
file diagnosis, **742**
FORTRAN, **1852**
C 7000 series digital computers floating-point half-word packing, **1306**
C 7600 digital computer, **2709**
plied to transcendental equations, **2920**
rkload evaluation, **566**
C CYBER 73 digital computer structured programming, **685**
C CYBER 74 digital computer applied to aircraft flight path data calculation, **1892**
C CYBER 76 digital computer linkage to a CDC 3600, **740**
ellular logic, 22, 170, 1976, 2666
haracter recognition, 872(P), **1148, 2552, 2556**(P), **2557**(P)
bliography, **1718, 1719**
lour coded characters, **2013**(P)
nploying
contextual information, **589, 1452**
learning network, **1709**
arrington 7B font, **2299**(P)
ndwriting, **337**(P), **2298**(P), **3205**(P)
capital letters, **1132**
handprinting, **2006**
numerals, **2287**
signature verification, **1134**
ne thickness normalisation, **2012**(P)
agnetic ink, **2014**(P), **2559**(P)

Character recognition—*cont.*
print quality evaluation for, **583**
Russian characters, **1715**
scanning, **2558**(P)
skeletonising characters, **2300**(P)
stroke width, variable, **44**(P)
see also Pattern recognition
Chemistry (including chemical engineering)
adsorption column simulation, **3382**
atmospheric deionization process simulation, **501**
bibliography, **1683**
chemical industry modelling, **1045**
diffusion, atomic, **502,**
discrete flow modelling, **3379**
distillation calculations, **3380**
equations of state fittings to thermodynamic data, **2724**
macromolecular system, x-ray scattering studies of, **2471**
mass spectrometry, **1633**
molecular dynamics calculations, **1371**
molecular models display, **1899**
nuclear magnetic resonance spectroscopy, **1898**
photolytic rate constants calculation, **3053**
polarography, differential pulse, **1332**
polymer dissolution kinematics, **1897**
protein sequences prediction, **1330**
reactions
simulation, **500, 1632**
thermodynamics of, **1331, 1900**
reactors
direct digital control of, **509**
fixed bed, **3381**
specrochemical analysis, flame, **1050**
stereochemistry of organic molecules, **835**(B)
see also Crystallography; Metallurgy; Pollution
Choreography, interactive graphics applied to: bibliography, **1683**
Chronology: computer handling of dates, **2580**
Cinematography: animation, **1385**
Civil engineering
buildings
energy system analysis, **3065**
heating and cooling loads in, **3064**
walls fire endurance analysis, **3396**
flood water surface profile computations, **1345**
pile driving analysis, **1640** to **1643, 1904** to **1907**
road surface dynamic loads calculation, **1344**
tainter gate analysis and design, **774, 775**
see also Structural engineering
Clock circuits, asynchronous, **1590**
COBOL
array handling, **2621**
COBOL 74, **143, 1950**(B), **2991, 2993, 3001**
coding form, **1249**
compiler validation, **454, 706, 708, 1853, 1854, 2102, 2103, 2401, 2402, 2653, 2977, 2979, 2994, 3006, 3282, 3288**
debugging, **2993**
HYPO-COBOL, **2985**
modification, **944**
program portability, **3003**
quality control, **2994**
standards, **133, 569, 1249, 2659, 3000**
structured programming, **133, 698, 1950**(B), **3001**
Codes
convolution, **190**
Gray, **891**
random error correction, **658**
seperable, **3190**
Combinations, 2332
COMDYNA GP-6 analogue computer applied to simulation of chemical reactor, **509**
Communications
air traffic control communications simulation, **2191**
electroacoustic transducer simulation, **567**
microcomputer applications bibliography, **2728**
monitoring of, **1052**
multiplex system evaluation, **1054**
paging system, **3355**
performance analysis, **2193**
picture predictive coder, **1901**
store-and-forward network, **213**
video processor, **215**
see also Data transmission; Electronics; Information theory; Radar; Radio: Signal processing; Telephone systems
Compilers
code generation, **2083, 2377, 3267**
cross-compilers, **2110, 2625**
diagnostic, **1223**

Compilers—*cont.*
for computer design, **1577**
indentation, **1225**
module linking, **139**
optimising, **445, 682, 2104, 2110**
programmable calculator code-producing, **2625**
testing, **3270**
validation of, **446, 447, 454, 706, 708, 1853, 1854, 2102, 2103, 2401, 2402, 2653, 2977, 2979, 2981, 2982, 2983, 2990, 3006, 3007, 3008, 3282, 3288**
writing system, **444, 1847**
see also Programming; *and specific computers and programming languages*
Complex numbers, floating-point representation of, **1181**
Computation theory, 3126(B), **3180**
algorithm structure, **1120, 1971**
asynchronous structures, computing cababilities of, **848**
composition, relational, **2865**
computability, generalised, **2836**
computable fields, **2539**
computational complexity, **16, 308, 310, 312, 1413, 1965, 2269, 2270, 2812, 2816, 2817, 2818, 2819, 2846, 2852, 3143, 3159**
decidability, **2820, 2828**
fixed point theory, **49, 2833, 2834, 2862**
flow diagrams, domain of, **2274**
Horn clause compatability, **2536**
information theory, algorithmic, **2529**
iterative theories, scalar and vector, **1693**
lambda calculus, **3174**
Linton algebras, generalised, **2837**
nondeterministic polynominal problems, **3160**
operator domains, many sorted, **2845**
partial fraction, expansion problem, **2853**
power series, formal, **2863**
programs
  correctness of, **1691, 1698, 2270**
  decision problems of, **3169**
  relational systems of, **2856**
  schemata, **3173**
    polyadic, **2851**
    recursive, **3148**
      nondeterministic, **2847**
      partial, **2854**
  vectors of coroutines, **2875**
record handling, mathematics of, **3158**
reducibility, **1694**
relational expressions evaluation, **1416**
sequences, partial, **2811**
spontaneous computation, **1124**
tree transformations, **3163**
type free λ-$\beta\eta$ calculus, **2835**
universal algebra theory, **2844, 2851**
Computer abuse, 1100
Computer aided design
applied to
  cams, **1645**
  dies for nonsymmetric forgings, **222**
  digital systems, **1264**
    multiplex systems, **2081**
  logic circuits, **21**
  ships, **274**
  structural engineering, **777** to **788**
bibliography, **3404**
geometric design, **3434**
integrated systems, **282, 1395**
  data structures, **1089**
  graphical features, **1669**
  programming languages, **559**
see also specific industries, engineering disciplines and technologies
Computer aided manufacturing, 506
applied to dies for nonsymmetric forgings, **222**
assembly systems, **1055**
system simulation, **2473**
see also specific industries, engineering disciplines and technologies
Computer assisted instruction, 568, 1637, 1639
applied to
  computer applications, **3388**
  computer programming, **199**
  electronics, **1903, 2206, 2740**
  geography, **511**
  mathematics, **2737**
    linear algebra, **2736**
  military training, **2207**
  music, **2735**
  sociology, **2734**
  team training, **2739**
Computer assisted instruction—*cont.*
artificial intelligence relations with, **2202, 2203, 2204, 3062**
bibliography, **2207, 3389**
computer system selection for, **1340**
individualised instruction, **510, 3390**
programming, **507, 2206**
system performance evaluation, **511, 1342**
see also Computer managed instruction
Computer installations
management
  chargeout systems, **1108**
  computer performance, **3132**
  operations scheduling, **294, 1685**
  programming, **1687, 1953, 2806**
    software acquisition, **1686, 1960**
    systems programming, **2258**
  university installations, **2807**
  workload analysis, **566**
service levels, **1680**
storage backup, **2808**
Computer managed instruction
by satellite communications, **3061**
see also Computer assisted instruction
Computer market
Austria, **302**
Denmark, **6**
Finland, **5**
Isreal, **7**
Netherlands, **306**
Taiwan, **11**
Computer networks, 1113, 2259, 2518, 3241
access procedures, **10, 1275**
ARPANET, **3, 300, 482, 1110, 1244, 1276, 1285, 2805**
bibliography, **712**
communications, packet switching, **482, 1581, 2696**
distributed, **1278**
file location optimisation, **1782**
load sharing, **969**
message routing, **968, 3311**
performance
  evaluation, **1111**
  measurement, **163**
programming
  control program, **1285**
  operating system, **427, 1244**
protocols, **3, 1234**
  interprocess communication, **1299**
  topology information maintenance, **2341**
response time-predicting monitor, **675, 2345**
security, **1262, 1959**
  cryptography applied to, **1265**
service quality, **4**
simulation of, **3013**
standards, **164**
usage
  model of, **3136**
  monitoring, **1110**
Computer science education, 489, 568, 1309, 1310, 2256(B), **2459, 2460, 3365**
bibliography, **748**
business data processing, **2253**(B)
examinations, **2176, 3040**
information systems, **2174**
microcomputers, **3038, 3039, 3041, 3042**
microprogramming, **3043**
model-building, **200**
programming, **199, 1312, 1888, 2458, 2461**
  compilers, **3366**
  languages, **1013**
systems analysis, **2176**
Computers, social consequences of, 2514
public attitudes survey, **1115**
Computing costs
accounting system, **567**
chargeout systems, **1108, 2260**
computing services, **12**
programming, **301, 305, 2806**
risk analysis, **2520**
Computing history
chronology of computing devices, **295**
Europe, **1106**
  Central, **1101**
Joint and National Computer conferencès, **1103**
stored program computer proposed by Turing, **2517**
Computing services: charge estimation by benchmarking, **12**

rence proceedings
mata, Languages and Programming, Fourth Colloquium on 1977), **3435**(B)
PSTAT Symposium, Second (1976), **834**(B)
puter-Aided Design in Structural Engineering, Corps-wide Conference on (1976), **777** to **788**
amentals of Computation Theory, International Conference on 1977), **3126**(B)
-Output Techniques, Sixth International Conference on (1974), **096**(B)
nal Computer Conference (1976), **1402**(B)
are Engineering, Second International Conference on, **418**
Large Data Bases, Second International Conference on (1976), 564(B)
rencing systems, 1674
rmal mappings, 2312
nt addressable memory *see* Associative memory
nued fractions
uler's constant, **2902**
sculatory rational interpolation, **358**
dimensional, **1175**
ation error estimated, **2311**
rol
level, **1335, 1336, 3058**
ics, **771, 772**
n design, computer aided, **218, 219, 1636, 3059**
nstrained, **217**
lso Direct digital control; Inventory control; Numerical control; Optimal control; Parameter estimation; Process control; Production control; Quality control
erters, analogue/digital
gue-to-digital, **2164**(P)
l-to-analogue, **478**
erters, code
y to Gray code, **189**
ble, **2432**(P)
ng
tion well owning and operating, **1895**
action engineering, **1894**
ters employing insulated gate field effect transistors, **3335**(P), 3337(P)
al path method, 2185
tography for computer security
uter networks, **1265**
bases, **1180**
transmission, **1884**
erivation, **1178, 1182**
use techniques, **1194**
ard, **1682**
allography: statistical analysis of crystallographic data, **766**
e fitting, 901, 1211
ography, **1683, 1684**
oying
bic splines, **1205, 2331**
cewise polynomials, **1789, 2343**
active graphics program, **915**
rnetics, 836(B)
ed to
vernment, **3049**
ietal systems, **556, 557, 558**

a base systems, 546(B), **571, 1811, 2075, 3226**
ractions
ggregation, **2054, 2589**
neralisation, **2589**
ssing, **96, 380, 1495**
ting, **2076, 2357, 2358**
iography, **378, 2363, 2364**
sistency, **102, 909**
t compression, **1201**
t manipulation language, **413**
t organisation, **898**
ptimal reorganisation, **103**
t transfer between different systems, **376**
ributed, **1198, 1818, 2366, 3284**
r detection, **1188**
medicine, **1650, 1651**
archical, **1200, 2338, 2655**
grity of, **1192, 1531, 2351, 3231**
nal schema selection, **377**
processor for, **1189**
agement, **144, 390, 1529, 2372, 2962**

Data base systems—*cont.*
deductive processor for, **379**
models, **391**
on-line, **1190**
performance evaluation, **114, 1201, 1541, 2337, 2632**
privacy protection, **430, 3130**
programming, **154, 408, 704, 705**
deadlock handling, **926**
language, **394, 1200**
relational, **141, 389, 413, 1528, 1531, 1535, 1785, 3243**
security, **1180, 2349, 2606**
simulation, **919**
special-purpose computer for, **456, 458, 1268, 1582, 1874, 2135**
statistical, **2598**
storage parameters optimisation, **1753**
updating, **127**
user interface, **381**
see also Data management; Files
Data collection, 1812
aircraft fatigue monitoring data, **1017**
for communication monitoring, **1052**
meteorological data, **1064**
modular system, **1291**
Data compression, 1817, 2370, 3254
bibliography, **1212, 1213**
system efficiency, effect on, **1201**
text files, **95**
Data conversion, 97, 1231
Data editing, 398
Data management, 130 154, 920, 1003, 1529, 2362, 2372, 2381 to **2385**
bibliography, **2363, 2364**
buffer assignment, **129**
deductive processor for, **379**
processor scheduling, **144**
relational, **404, 1535**
security, **1815**
Data storage, 175, 3437(B)
addressing, **988**(P), **3029**(P)
beam, **2437, 2692**(P)
backup storage facility, **1290**
bibliography, **981, 982**
cache architecture, **174**
employing
capacitors, **472, 1604**(P)
charge coupled devices, **729, 1289, 2681, 2685**(P)
diodes, **993**(P)
integrated circuitry, **182**(P), **985**(P), **1600, 3349**(P)
magnetic bubble devices, **173, 181**(P), **468, 994**(P), **1605**(P), **1608**(P), **1877, 2443**(P), **2689**(P), **3026**
bibliography, **473**
magnetic cores, **984**(P), **1606**(P), **1607**(P), **2153**(P)
multi-bit, **987**(P)
magnetic thin film, **477**(P), **2690**(P)
plated wire, **180**(P)
magneto-optical devices, **3024**
semiconductor devices, **2155**(P), **2686**(P), **2687**(P), **3328**
bibliography, **2150**
metal nitride oxide, **990**(P), **2438, 3025**
metal oxide, **2441**(P), **2684**(P), **3343, 3344**
regenerating circuits for, **732**(P)
testing, **731**(P)
silicon controlled rectifiers, **1603**(P)
superconductive devices, Josephson, **992**(P), **2154**(P)
transistors, **983**(P), **1603**(P), **2442**(P), **3030**(P), **3345**(P)
bipolar, **183**(P), **467, 989**(P), **2156**(P), **3341**
field effect, **183**(P), **467, 991**(P), **2691**(P), **3349**(P)
insulated gate, **1604**(P)
variable threshold, **179**(P)
floating-gate avalanch injection, **177**(P)
merged charge, **3339**
error correction, **2433**
fault detection, **3027**
fundamental physical concepts, **474**
indicator of number of bytes stored, **178**(P)
intelligent memory, **1288**
interleaved memory, **476, 2149**
'lateral memory' concept, **94**
multi-access, **1878**
storage capacity of general digital circuits, **14**
ternary, **1600**
testing, **1876, 2435**
Data structures, 956, 2593
abstract data types, **2082**
arrays, **1766**
dynamic properties under insertions and deletions, **2607, 3227**
for pattern recognition, **1444**

Data structures—*cont.*
optimisation of, **1185**
pattern recognition, relationships with, **1443**
PQ-tree, **392**
relational, **413, 2538, 3175**
restructuring of data, **97**
selector graphs applied to, **3239**
Data transfer between
autonomously operating processors, **3014**(P)
central processing unit and peripheral controller, **3017**(P)
computer and peripherals, **2446**(P)
Data transmission, 483, 1097(B), **2518**
asynchronous, **2705**(P)
bit-parallel byte-serial systems, **1001**(P)
burst processing, **484**
coding for, **190**
delay equalisation, **1616**
distortion reduction, **2166**(P)
error control, **739**(P), **999**(P), **1617**(P), **1884, 2168**(P), **2451**(P), **3033**(P)
Federal Communications Commission policies, **1300**
front end processors, **485**(P)
mini and micro computer uses in, **1000**
modems, **3356**
  binary to Gray code converter for, **189**
modulation systems, **191**(P), **2167**(P), **2450**(P), **3359**(P), **3361**(P)
packet switching, **482, 1298 1304, 2448, 2696, 2700** to **2704**
  combined with circuit switching, **2698**
  measurement facilities, **1301**
  standardisation of **164**
performance evaluation, **2699, 3358**
power line use for, **2453**(P)
security, **1884**
simulation, **2165**
store-and-forward systems, **213, 2697**
synchronisation, frame, **1303**
DEC System-10 digital computer
applied to
  geophysics computations, **1666**
  kidney transplant matching, **1362**
  statistical computations, **2930**
instruction set processor, **1272**
performance evaluation, **3035**
programming: operating system, **1253**
DEC System-20 digital computer programming: COBOL compiler validation, **3006**
Decision making, 210
adaptive, **1705**
decision analysis, **1706**
group, **3375**
information evaluation for, **761**
man-computer interaction, **1774**
political, **3100**
Decision tables programming, **1848, 3285**
Demography
census data base handling, **1391**
demographic-economic model, **2506**
Denmark: computer market, **6**
Differential equations
identification of, **1163**
ordinary, **116, 128, 339, 346, 350, 637, 669, 910, 1169, 1174, 1497, 2564**
  bifurcation problems, **2319**
  error estimation, **1745, 1772**
  first order, **66**
  Mathieu, **370**
  nonlinear, **373, 2335**
    bibliography, **889**
  second order, **622, 883, 914**
  stiff systems, **361, 371, 373, 375, 612, 1158, 1165, 1725, 2045, 2071, 2313, 2562, 3206**
partial, **1177, 2021, 2563**
  bibliography, **372**
  elliptic, **53, 623, 625, 882, 1157, 2024, 2323**
  first order, **198**
  hyperbolic, **56, 57, 58, 63, 75, 614, 1460, 2044, 2301, 2347, 2901, 2923**
  parabolic, **57, 601, 1460, 1461, 1466, 2016, 2024, 2917**
stochastic, **606**
Differentiation, 1475
Diffusion equation
linear, **2032**
microcomputer network applied to, **2129**
nonlinear, **265, 267, 2032**
Digital computer architecture, 1677(B)
aerospace computer, **2462**
array
  interconnection networks, **1258**
  varistructured, **1282**
Digital computer architecture—*cont.*
bus system, **2143**(P), **3312**(P)
data manipulator, **3012**
developments forecast, **1113**
high reliability, **717**(P)
instruction set processors, **1272**
integration, effects of, **1873**
pipeline systems, **1280, 1871, 2417, 2420**
programmable algorithm machine, **320, 321**
result reliability-estimating computer, **966**
universal, **1588**(P)
Digital computer arithmetic unit
modulo, **159**
recent research survey, **460**
Digital computer control unit
bus control system, **1592**(P)
channel control, **3316**(P)
edit unit, **720**(P)
instruction processing, **2428**(P), **3313**(P)
interrupt arrangements, **2138**(P), **2422**(P)
magnetic tape unit fault recovery, **2139**(P)
memory control, **166**(P), **466**(P), **977**(P)
microprogrammed, **721**(P), **3320**(P)
modular logic, **1579**
Digital computer design methods
employing a computer, **1264**
top-down design, **2673**
Digital computer general texts, 563(B), **1592**(B), **1958**
Digital computer input/output system
channel unit, **2141**(P)
developments forecast, **1113**
keyboard input, **463**(P)
microcomputer, **964**
remote terminal, **737**(P)
serial interface, **722**(P)
switching system, **3315**(P)
television camera, **3032**
see also Input; Output
Digital computer memory unit, 1273
addressing, **2679**(P)
  direct, **3319**(P)
buffer arrangements, **3318**(P)
correction system, **1593**(P)
for video images, **160**
hierarchical, **716**(P), **718**(P), **1284**
mass memory extension, **1589**(P)
microcomputer, **964**
parellel pipelined processor, **1277**
segmented, **973**(P)
updating system, **167**(P)
Digital computer models, 671, 1274
Digital computer monitor system, 719(P)
Digital computer performance
analysis of, **1956**
  bibliography, **570**
  cost/utilisation, **1105**
  event series statistical analysis, **1540**
  management of, **2516**
  multiprocessing system, **2527, 2528**
  simulation for, **711**
  workload analysis, **566**
measurement of: benchmarks, **1, 3133**
prediction, **1266**
  resource allocation, **1578**
Digital computer power supply systems
transistor switching circuit for, **3022**(P)
uninterruptible power sources for minicomputers, **2671**
Digital computer, special purpose
architecture of, **714**(P)
data base, **456, 458, 1268**
fast Fourier transform, **965**
Walsh-Hadamard transforms, **2062**
Digital differential analyser
floating point, **196**
hardware economisation for, **487**
Digital stochastic computers, error reduction in, **2173**
Diophantine equations, 2855, 2939
Direct digital control applied to
chemical reactor, **509**
thyristor, **3386**
Displays, 3134
character, **2695**(P)
data entry, **187**(P)
graphics, **479**
  annotation, **1610**
  circular arcs, **996**

lays—*cont.*
olour, **185**
onic section, **186**
al world, scenes, **736**
t devices, superimposed on, **3350**
rix, **738**(P)
ma, **1612**
eys of, **2160, 2162**
ributed processing, 1271
ography, **3255, 3256**
puter network, **1278**
oprocessors system, **2592**
essor/memory system, **1875**
umentation of programs, **2257**
amic programming applied to transportation system expansion, **494**

logy
strophe theory application, **2499**
ystem management, **2335**
nomics
sifying economies by degree of socialism, **827**
t processing project economic feasability assessment, **1679**
lels
ggregative, **1020**
ectrical energy consumption, **1672**
edback, **2470, 3376**
rowth, **2716**
cyclic, **760**
ational
Great Britain, **2506**
Italy, **764**
etrol consumption, **2186**
ochastic, **765**
also Input-output analysis
cation (computer applications)
1341
ficial intelligence, interactions with, **2204**
puter networks, **1056**
nseling and guidance: bibliography, **2738**
ct digital control, **509**
mination procedures, university, **2476**
ractive graphics: bibliography, **1683, 1684**
esources allocation, **773**
ater resources planning, **1338**
oung children, **1339**
also Computer assisted instruction; Computer managed instruction; Timetables
envalue problems
ferential operators, **363**
eralised, **633, 890, 1798, 2041, 2616**
ated Galerkin method, **357**
ar, **347**
ctrical engineering
tric car battery requirements, **3430**
trode-to-ground resistance determination, **2209**
tromagnetic device production line optimisation, **2208**
cell power conversion system simulation, **3071**
gnetic field calculations, **3075, 3397**
tors
apacitor, **3073, 3074**
nduction, **3072, 3399**
ential field calculations, **3070**
wer systems
onsumption model, **1672**
ontrol, **1346, 3398**
lemand analysis, **1347**
listance relays testing, **3068**
listribution, **1908**
ydroelectric: water level regulation simulation, **560**
nterconnected systems, **1644, 2478**
ine fault protection, **221**
nine system safety testing, **2494**
parallel ac-dc system, **3069**
cheduling, **3066**
ransmission transients simulation, **3067**
grams, directory of, **2479**
also Electronics
ctronics
cuits
nalysis, **513, 1057, 3394**
lesign, **513, 3393**
bibliography, **1684**

Electronics—*cont.*
computer assisted instruction in, **1903, 2206, 2740**
printed circuits
connections optimisation, **2477**
two-layer board feedthroughs minimisation, **2741**
semiconductor devices simulation, **3063**
symbolic network functions generation, **3392**
testing, **3391**
transistors
bipolar: analogue computer for circuit simulation, **3036**
high-voltage power: analysis, **2742**
see also Integrated circuitry
Emulation
Burroughs D-machine emulation of
AN/UYK-7, **1857**
AN/UYK-20, **2708**
computer peripheral units for, **162**
microprocessor software, emulator for developing, **970**
remote terminal, **2445**
Environmental planning
input-output model applied to, **1023, 1024**
project environmental impact analysis, **2796**
Error analysis, 1152
algebraic manipulation applied to, **2051**
finite element method, **70**
operator theory applied to, **885**
periodic analytic functions, **2025**
Error correction and detection applied to
data base systems, **1188**
data transmission systems, **739**(P), **999, 2168**(P), **2451**(P)
digital devices, **1505**
memory systems, **2433**
programs, **1505**
spelling errors, **1755**
see also Codes
Error function
approximation of inverse of, **71**
repeated integrals of coerror function, **2932, 2945**
ES-1040 digital computer, evaluation of, **1305**
Europe, early history of computers in, **1106**
Exponentiation, 1196
Extrapolation of tabular data, **1819**

F

Fail-safe systems, 574
Fault diagnosis
adaptive, **322**
computer systems, **3015**(P)
faul isolation, **165**(P)
fault simulation for test verification, **324**
logic
alternating logic design, **854**
combinational, **322, 323, 1431, 1433, 1703, 2277, 2543**
sequential, **2276**
TTL, **469**
memory, **3027**
peripheral devices, **2157**
test sets, **161, 1433**
generation, **323, 2543**
tree networks, **577**
Fault tolerant systems, 457, 1428, 1429
computer, **3321**(P)
for spacecraft, **3370**
Galois linear modules, **28**
multiprocessor, **2674**
optimal, **18**
sequential machines, **574**
FELIX C-256 digital computer applied to production planning, **2717**
Files
allocation in computer network, **913**
differential, **2365**
list processor for, **1189**
organisation
inverted index, **1777**
secondary index, **2348**
sequential, **393, 2590**
trees
binary
balancing of, **83**
locally-balanced, **98**
random, **125**
prefix-B, **2352**
trie index, **2340**

Files—*cont.*
partioning, **662, 3229**
predicate, **3237**
programming, **2356**
search procedures, **104, 111, 1191, 1757, 2350, 2934, 3217**
Filters, digital
employing complex Mersenne tranforms, **91**
FIR, **1534**
IIR, **1770**
multidimensional, **1534, 1537, 3228**
recursive, **1509, 3224, 3228, 3233**
Finance
estate management planning, **758**
management information system, **493**
portfolio selection strategies, **757**
public investment, **1022**
Finite element methods, 2033
applied to
aircraft structures, **1014**
coal mine structures, **258**
differential equations
elliptic, **1157, 2314, 2323, 2910, 2918**
hyperbolic, **56**
parabolic, **1464**
diffusion equations, **2032**
Dirichlet problem, **2918**
flow, viscous, **546**
minimal surface approximation, **3223**
Stokes equations, **62**
stress analysis, **3405**
thermal, **1058**
error bounds, **2579, 3207**
irregular meshes, **70, 397**
Finland: computer market, **5**
Floating point computations, 460
complex numbers, **1181**
multiplication, **1503**
multi-precision, **399**
Fluid dynamics
boundary layer flows, **548, 2238**
compressible flow, ideal, **1374**
convection, **811, 1375**
display system for, **2236**
Navier-Stokes equations, **1661**
nozzle flow calculations, **271**
rotational flow, **1658**
shock wave calculations, **266**
Stokes equations, **62**
transonic flow, **3210**
Food industry: fish freezing process simulation, **2248**
FORTRAN
bibliography, **2107**
compiler validation, **446, 447, 2981, 2983, 2990, 3007, 3008**
extended precision, **1840**
identifier spelling error detection, **2627**
input-putput, **1837**
portability, **2390, 3005**
program analysis, **684, 1242**
standards, **1858, 1859**
storage allocation, **134, 135**
variable length records reading, **930**
Fourier transform, 402, 900, 1504, 2588, 2953
computational complexity of, **2937**
error analysis, **1517**
floating point, **2059**
special-purpose computer for, **965**
France: analysis fo economy, **1027**
Function generators
Bessel functions, **1623**
multivariable, **746, 1308**
sine/cosine, **171**
two-variable, **2711**
Functions
analytic: lower bounds for zeros, **616**
biquadratic, **80**
hill, **2306**
rational, **1459**
roots multiplicity estimation, **349**
zero-finding, **1731**
Fuzzy logic, 20, 26

G

Galerkin method
applied to
boundary value problems, **2330**
second order, **352**
two-point, **367**
differential equations
elliptic, **2024**
hyperbolic, **57, 58, 65, 879, 2923**
identification of, **1163**
nonlinear, **1471**
parabolic, **57, 65, 2024**
eignvalue problems, **357**
collocation, **367**
iterated, **357**
Games, 2011
card games: poker, **1436**
chess, **1982, 1984, 1985, 1988**
sequenatial games, **1695**
war games, **252**
Gamma function ratio, incomplete, **911**
Geography, computer assisted instruction in, **511**
Geology
lineament detection, **2546**
mining area mapping, **257**
Geometry
descriptive, nonlinear, **593**
relationships with statistics, **401**
theorem proving, **1995**
Goal programming, 3050
Government
computer acquisition, **2526**
cybernetics in, **3049**
data base administration, **13**
effective computer use, activities in support of, **1688**
housing market information system, **1048, 1049**
local
minicomputers, **2188**
payroll, **1329**
personnel administration, **1329**
statistics on computer usage, **3129**
Graphics, computer, 1209, 2011
applied to
geometry problems, **593**
organisation chart generation, **499**
associative memories for, **1760**
conic sections, **186**
convex hull determination, **90**
corner detection, **1501**
curve generation, **99**
digitisation, **735**
display systems, **481, 733**
interactive, **912, 916, 1882, 2108, 2368, 2941, 3353**
bibliography, **1683, 1684**
line drawing processing, **1210, 1216, 2079, 2113, 2599, 2961**
objects, procedural description of, **107**
perspective view production, **403**
polygons, representative of, **1203**
programming language, **2113**
shaded image production, **2602**
surface generation, **3236, 3247**
Graphs
applied to
computational complexity, **312**
output set assignments, **318**
synchronising primitaves characterisation, **1417**
augumentation for given connectivity, **342, 1519**
colouring problems, **82, 2946**
comparability, **1965**
cycle finding, **2950**
dimension determination, **2823**
directed, **2342**
acyclic, **2043**
isomorphism testing, **1781**
recreation from K-formula, **100**
shortest path determination, **2584**
tour lengths, **311**
flow graphs, reducible, **314**
grammars, **2825, 2838, 2860, 2871**
Hamiltonian circuit problems, **315**
interval, **392**
isomorphism, **2577**
matching problems, **3251**
maximal independent sets, **2915, 2947**
maximum cut determination, **1414**
planarity testing, **392**
selector-graphs, **3239**
spanning trees

phs—*cont.*
inimum, **351**
eighted, **1524**
graph identification, **653**
up theory
ic groups, free products of, **45**
e wreath products, projective representations of, **2325**
(n,Z), maximal finite irreducible subgroups of, **2315, 2316**
ple groups, orders of, **2321**

damard transform, 1492
ristic search
irectional, **1435, 1707**
metric analysis of strategies, **1121**
ristic path algorithm, **1991**
wlett-Packard 9810A digital computer applied to tethered balloon system calculations, **1891**
wlett-Packard 9030A digital computer applied to photographic emulsion calibration for spectrographic analysis, **2779**
tory
erican revolution, quantative analysis of, **2791, 2792**
chine readable archives, **2504**
lographic memory, 727, 2152(P), 2688(P)
ociative, **728**
lography
nputer generated, **1808**
rowave, **1090**
neywell 635 digital computer
rface with PDP 11/35, **2454**
e-sharing system **744**
neywell 6000 digital computers
a management system, **130**
formance evaluation, **2527, 2528**
neywell 6080 digital computer program verification, **3292**
neywell 6180 digital computer
lied to pattern recognition, **1457**
rface with
omputer network, **743**
PDP 11/35, **2454**
mory requirement estimation, hardware for, **3009**
gramming
ardware reliability checking, **1620**
program verification, **3292**
man engineering, 291
manities, 281
brid computers, 1009
ploying digital simulator for analogue portion, **1886**
d-wired analogue subprograms for, **1624**
mogeneous, **197**
note terminals for, **747**
brid computing techniques, 488
le dynamics problems, **3120**
tinuous systems simulation, **486**
ferential equations, first order partial, **198**
ction generation, multivariable, **1308**
ndtl-Meyer function inversion, **201**
gramming languages, **1010, 2713, 3037**

M 360 digital computers
plied to
helicopter simulation, **205**
initial value problems, **124**
random number generation, **1775**
space shuttle orbiter control system analysis, **3371**
statistical computations, **2078**
put/output system, **481**
kage to PDP 11, **1822**
ogramming: FORTRAN, **2981, 3007, 3008**
M 360/30 digital computer applied to
rebello-thalamo-cortical signal analysis, **522**
istic variable generation, **2181**
M 360/50 digital computer applied to
adotropic polynomials, **55**
tistical computations, **2930**
M 360/65 digital computer applied to
ster analysis, **1793**
od computations, **1345**

IBM 360/67 digital computer applied to travelling salesman problem, **1890**
IBM 360/75 digital computer applied to general relativity problem, **268**
IBM 360/95 digital computer compared with ILLIAC IV, **692**
IBM 360/195 digital computer applied to
computer network usage analysis, **1110**
organisation chart generation, **499**
IBM 370 digital computers
APL machine emulation, **1885**
applied to
fast Fourier transform, **2953**
initial value problems, **124**
inventory control, **2719**
pharmokinetic data processing, **521**
statistical computations, **2078, 2369**
input/output system **481**
linkage to PDP 11, **1822**
programming
COBOL, **3282**
data management, **2381** to **2385**
FORTRAN, **2981, 3007, 3008**
operating systems
ICES executive, **2405**
VM/370, **2169**
IBM 370/155 digital computer applied to
aircraft emergency evacuation simulation, **2180**
aircraft pilot switching performance evaluation, **756**
meteorology satellite telemetry data simulation, **2771**
IBM 370/158 digital computer applied to
integration, **82**
prime number testing, **112**
quadratic field class number determination, **87, 2921**
seismic data processing, **2508**
IBM 370/165 digital computer applied to function minimisation, **1741, 1791**
IBM 370/168 digital computer, **2709**
applied to
dialect item distribution mapping, **2761**
pollutant mass spectra interpretation, **1633**
programming: cross assembler, **2984**
IBM 5100 digital computer applied to laboratory automation, **2243**
IBM System/7 digital computer APL system, **2084**
IBM System/32 digital computer, **192**
ICL 1900 digital computers programming
COBOL, **2621**
SNOBOL, **1238**
ICL 1904S digital computer programming: plotting, **2159**
ICL 1906S digital computer operating system: correction system, **1247**
ICL 2970 and **ICL 2980** digital computers job control facilities, **1002**
ICL 4130 digital computer video terminal system, **734**
ILLIAC digital computer, **2709**
ILLIAC IV digital computer
applied to
climatic data processing, **1935**
convection calculations, **1941**
compared with IBM 360/95, **692**
India, current trends in computers in, **2515**
Inequalities
nonlinear, stability of, **74**
variational, parabolic, **50, 2909**
Information retrieval, 2484, 2755
bibliographies, **230, 231, 517, 518, 519, 790, 1353, 1355, 1356, 2213**
consecutive retrieval, **1646, 3079**
deductive system, **1060**
feedback, **2481**
indexing
automatic, **2483**
substring index, **2753**
input, **2485(P)**
interactive systems, **1059, 1351**
natural language interrogation, **232, 2214**
on-line systems, **1915, 3407**
relational systems, **1914, 3076**
relevance estimation, **516**
search techniques, **2482, 2756, 3230, 3408**
subject matter
aircraft maintenance, **3080**
bibliographies, **292, 515, 1059**
economic statistical data, **2212**
history, **2174**
material properties, **789**
medicine, **1914, 2754**
military
intelligence, **533**
tactical data, **253**
socio-technological issues, **3081**

Information retrieval—*cont.*
system evaluation, **1350**
thesaurus bibliography, **1678**(B)
see also Data base systems; Files; Question answering systems
Information theory
algorithmic, **2529**
information transmission in computational systems, **1699**
Initial value problems
convergence, **591**
Hermitian methods, **1472**
hyperbolic, **62, 65, 2021, 2044, 2302, 2347**
nonlinear, **1471, 1734, 2044**
parabolic, **51, 65**
quasilinear, **2029**
singular, **2899**
stability, **591, 632**
stiff differential equations, **124**
Input
Chinese, **1880, 1881**
graphic tablet, **3352**
handicapped personnel, aids for, **1294**
images, **2161**
keyboard, **3031**
  Touch-Tone, encoding for, **1609**
multiple key station, **2694**
pushbuttons with superimposed displays, **3350**
stereometric, **995**
Input-output analysis, 1096(B)
chemical industries, **1045**
corporate planning, **1044**
economic growth, **1020, 1046**
  Canada, **1031**
  Great Britain, **1039**
  Japan, **1021, 1030**
  Philippines, **1040**
  Puerto Rico, **1025**
  U.S.A., **1026**
environmental problems, **1023**
  pollution, **1037**
interindustry, **2721**
international trade, **1033, 1035**
interregional, **1018, 1027, 1028, 1034, 1036**
intersectoral, **1029, 1041, 1042, 1043**
Leontief model, **1032**
price changes, **1019, 1038**
residuals management, **1024**
Wigley production function use with, **1047**
Installing a computer
computer selection, **1, 2262**
  benchmarking, **3133**
  microcomputers, **2261**
contracts, purchase, **1954**
performance evaluation, **1956**
procurement administration, military, **304, 2264**
system development management, **2263**
time-sharing systems, **8**
Instrumentation: microcomputer applications
bibliography, **2799**
shaft speed measurement, **3103**
Insurance data processing, **211**
Integer programming
applied to fully symmetric integration formulae construction, **2017**
block angular problems, **1527, 2360**
test problem generation, **2344**
Integral equations
analytical solution, **2336**
Fredholm
  first kind, **3214**
  second kind, **1744, 1754**
Volterra, **2926**
  first kind, **366, 2906**
    weakly singular, **72**
  nonlinear, **360**
Integrals
chi-squared, **1788**
Dawson, **2308**
Fourier, **355**
Laplace, **873**
oscillatory, **261**
Integrated circuitry
computer aided design of, **21, 324**
fault diagnosis, **3310**
logic, **21, 169, 467, 724**(P), **2680**(P), **3393**
LSI computers, **715**(P)
memory, **182**(P), **467**
testing, **3305**
Integrated circuitry—*cont.*
wire routing, **3395**
Integration
adaptive, **1783**
automatic, **1785, 1801**
error estimation, **348, 610, 880, 1727**
formulae
  Chenyshev, **2037**
  cubature, **1170, 2022**
  fully symmetric, **2017**
  Gaussian
    extended, **68**
    Gauss—Legendre, **1727**
    generalised, **123**
  interpolatory, **2027**
  Maclaurin, **886**
  Newton-Cotes, **1730**
  optimal, **1468**
  osculatory, **1726**
  tanh, **2925**
  Wilf, **2047**
Monte Carlo, **46**
multidimensional, **627**
oscillatory functions, **812**
singular integrands, **82, 1173**
Integro-differential equations
collocation methods, **2020**
Volterra, **341, 2926**
Intel 8080 digital computer
applied to
  coal mine electric cable fault location, **3076**
  control robotics, **771**
  fast Fourier transform, **2953**
programming, **2707**
Interpolation
Hermite, **1773, 3222**
Lagrange, **2914**
polynomial, **106, 353, 1789, 2908**
rational, osculatory, **358**
rectangular mesh, data defined on, **77**
spline, **1804, 2935**
  cubic, **88, 1819**
  natural, **1526, 2905**
  quintic, **1748**
two-dimensional, **93**
Interpreters, 1831
Interval arithmatic, 888, 2615
Inventory control, 2719, 3377
Iron and steel industry
diffusion processes simulation, **212**
ingot processing simulation, **3097**
Irrigation well owning and operating costs estimation, **1895**
Israel: computer market, **7**
Iteration
convergence testing, **2933**
extrapolated alternating direction implicit methods, **356**
minimal residue, **2034**
scalar and vector, **1693**

J

Japan: economic input-output models, **1021, 1030**
JOVIAL programming language: source program analysis, **2987, 2988, 3292, 3293**

L

Laboratories
automatic system, **2243**
microcomputer applications, **2789**
minicomputer applications, **2513**(B)
programming language, **2642**
Languages, formal, 3435(B)
abstract families of, **2532, 2826, 3179**
algebraic, **1421**
applied to program design, **2356**
context-free, **309, 1122, 1415, 1967, 1972, 2532, 2815, 2867, 3156, 3162, 3171, 3176**
context-sensitive, **1969, 3146**
degree-language, **1689**
derivation languages, **3140**
developmental languages, **3178**

uages, formal—*cont.*
nctive, **2822**
'ilance and containment problems, **2271**
'alised approach to, **1968**
mars
nonical forms, **2815**
egorical, **2813**
grammar, **2531**
ain, **3168**
pergrammars, **845**
R(*k*), **1962, 1963, 3161**
acro, **3157**
rmal form, **1970**
rsable, **2534**
rase structure, **1972**
obabilistic, **2537**
gular right part, **3164**
ansition network, **1425**
ee, **1418**
stems, **3144, 3151, 3157**
ic), **3155**
ga-languages, **2826, 2849, 2859**
ing, **1962, 1963, 3147**
edence functions, **1122**
luction systems, **1419**
lar, **2849, 2857, 2858, 2870, 3150**
zzy, **2830**
antics, **572**
gebraic, **2839**
ard languages, **2868, 3165**
languages, **313, 1123, 1427**
lace equation
chy problem, **2018**
chlet problem, **1161**
lace transform
rsion of, **648, 1794, 2067, 2569**
ences, accelerating convergence of, **1480**

rmation system, **1392**
gram protection, **3131**
rning
omata, **29**
ctive, **1985**
works, **1709**
parametric, **35**
st squares methods, 1155
onditioned problems, **2560**
ar, **2039**
ynamic systems, **1473**
ith interval coefficients, **78**
linear, **1762, 2586**
endre functions, 2353
raries, 1352
ear programming, 1735
sistent linear equations, **2030**
onditioned problems, **908**
linear initial value problems, **2044**
plex algorithm, revised, **2565**
h several objective functions, **2183**
o-one, **1763**
guistics, 239 2757, 2758
liographies, **795, 1355, 1356**
ngualism investigation, **236**
nese input/output, **235, 238**
lect data analysis, **2761**
course analysis, **1354**
mology, Romance, **2760**
ropean Intellectual Lexicon, **233**
nch, **237**
erative grammar analysis, **1647**
icography, **2486, 2759**
Czech, **794**
Spanish, **792**
tence analysis, **2762**
tistical analysis, **234**
tactic analysis, **1648**
also Mechanical translation; Text processing
SP programming language
omatic programming system, **688**
structure in, **928**
riting system for program improvement, **3289**
t processing, 1189
ertion sort, **1746, 1779**
erature, 239, 2757, 2758
thorship identification, **280, 285, 824**
ncordances

Literature—*cont.*
Icelandic legal texts, **1671**
medieval German lyric manuscripts, **828**
novels, **277**
Spanish epic poem, **2785**
St. Thomas Aquinas's publications, **2502**
European Intellectual Lexicon, **233**
Hebrew bible, **278**
phonological analysis of German verse, **2247**
programming language, **826, 1670**
text encoding, **1668**
text storage, **2788**
Lockheed SUE digital computer applied to antenna tracking, **3056**
Logarithms: dilogarithm function, **1797**
Logic cicuitry, 3328
binary comparator, **2148**(P)
Boolean function-solving circuits, **2146**(P)
computer aided design of, **21, 3393**
employing
charge coupled devices, **3323**
integrated circuits, **169, 724**(P), **2680**(P), **3327, 3330, 3334**(P), **3393,**
magnetic bubble devices, **468, 1598, 3020**
MOS cells, **2544**
transistors, **3022**(P)
bipolar, **467**
field effect, **467, 3327**
insulated gate, **2680**(P), **3334**(P), **3335**(P)
frequency dividers, **3326**
initialisation, **3021**
integrated injection logic, **3324, 3325, 3326, 3329, 3331, 3332**
quad programmable gates, **169**
state graph cycle detection circuit, **1595**
TTL, **469**
Logic, computer *see* Asynchronous logic, Cellular logic; Logic circuitry; Logic design; Multivalued logic; Threshold logic; Universal logic
Logic design
alternating logic design technique, **854**
bibliography, **1126**
combinational, **3182, 3183, 3187**
computer aided, **21, 1702**
fuzzy functions, **20, 26, 2878**
hazard detection, **24, 1700, 2877**
iterative combinational, **578**
master-slave circuits, **25**
NAND-NOR, **835**
negative binary, **576, 1973**
postfix notation, **1125**
Reed-Muller canonical forms, **1432**
self-checking, **855, 3190**
self-synchronising, **1434**
sequential, programmable, **2540, 3188**
simulation, **27, 324**
symmetric function, arbitary function transformation to, **19**
see also Boolean algebra; Fault diagnosis; Fault-tolerent systems
Logistics
cost analysis, **2774**
distributed data bases for, **1939**
integrated logistics support, **2232**
logistic variable generation, **2181**

M

Magnetic recording of data, 471
disc
drive interfaces, **176**
flexible, disc controller, **2683**
performance analysis, **726**
tape, **2151**(P)
access time evaluation, **2434**
zero modulation recording, **2682**
Management information systems, 1631
applied to bus transport, **273**
bibliography, **498**
computer aided analysis and design of, **493**
evaluation of, **209**
information needs of management, **1319**
management role in development of, **1328**
planning for, **1326**
programming language requirements, **2407**
response of management to, **1323**
Management planning, 2184
input-output analysis applied to, **1044**
system design criteria, **1321**
Manipulators, computer-aided remote, **3122**
Market research, 2182

Markov processes
ergodic, **101**
semi-Markov, **2668**
Wiener filtering of, **2058**
Mass memory
developments forecast, **1113**
employing
LSI semiconductor circuits, **182**(P)
magnetic tape cartridges, **2682**
organisation, **1602**
Mathematical programming
data base system for, **2964**
restart methods, **345**
see also Dynamic programming; Goal programming; Integer programming; Linear programming; Nonlinear programming
Matrices
bandwidth reduction, **1179, 1749, 1761**
block diagonal, **128**
Chebyshev method, **2320, 3215**
companion, **1728**
conjugate gradient method, **1733**
decomposition, **383, 1172**
determinants, **1722**
diagonalisation, **368**
error analysis, **2578**
exact solution, **2056, 2339**
exponential, **1723, 2952**
factorisation, **59, 61, 109, 617, 2038**
Gaussian elimination, **400, 617, 1463, 1511, 2322**
Hermitian, **1479 2046**
Toeplitz, **2327**
Hessenberg, **1747**
ill-conditioned, **69**
inversion, **310, 613, 1542, 2912, 2913**
Kronecker products, **77**
large order, **2367**
multiplication, **386**
norms, **1476, 2911**
polynomial, **590, 2567**
profile reduction, **1749, 1750, 1761**
quindiagonal, **2049**
QR algorithms, parallel, **1197, 3225**
reduction, cyclic, **73, 2904**
semigroups of, **3143**
sign stability, **3238**
skew-symmetric, **2040**
sparse, **92, 617, 1179, 1721, 1733, 1736, 2371, 2956**
Stein-Rosenberg theorem, **343**
transposing, **2050, 2585**
tridiagonal, **1197, 1543, 3225**
block, **73, 2904**
Walsh-Hadamard, **117**
Mechanical engineering
axial flow machine calculations, **223**
cam design, **1645**
cold-formed structural members stress-strain calculations, **1909**
compressor pressure measurements, **225**
computer aided design bibliography, **3404**
fan simulation, **514**
hydraulics: aircraft system analysis, **2744** to **2751**
mechanical assembly, **2210, 2743**
planar solids properties calculations, **226**
rotor system simulation, **3402**
skewed blading analysis, **2752**
track shoes and links closed-die forging, **222**
turbomachinery calculations, **2961, 3401**
vibrating systems calculations, **3077**
weldbonded joint deformation simulation, **224**
see also Rocket engines; Vehicles
Mechanical translation, 793
bibliography, **3082**
Russian-to-English, **240, 796, 2215**
Medicine, 1357, 2011, 2221
bacteria classification, **801**
bibliography, **3419**
cerebello-thalamo—cortical signal analysis, **522**
clinical network data base system, **1358**
computerised axial tomography bibliography, **1933, 1934**
diagnosis, **523, 581, 804, 1359, 3418**
ear: cochlea model, **3417**
echocardiography, **3084**
electrocardiography, **529, 584, 1061, 1652**(P), **1932, 2650, 3413, 3414**
bibliography, **1683, 1684**
fetal, **1925**
electroencephalography, **527, 1926, 2216, 3411**
electromyography, **2224, 2763**
Medicine—*cont.*
epidemic, model, **528**
eye-head system simulation, **3083**
eye movement analysis, **2487**
gait, electrogoniometric analysis of, **244**
health data collection, **1360**
health recordkeeping, **1681**
heart
cardiac arrhythmia classification, **526**
carotid pulse wave recognition, **530**
electrical activity examination, **242**
left ventricular
diameter time curve analysis, **520**
pressure data processing, **2764**
premature ventricular contractions model, **3416**
prosthetic valve
blood flow simulation, **1917**
dysfunction detection, **1916**
stress-strain analysis, **2219**
surgery, **2222**
systolic time interval calculation, **1920**
histopathology, glomerular, **3409**
hospitals
emergency facility utilisation simulation, **1921**
nursing home simulation, **799**
patient monitoring, **1931, 2770**
image processing, **587, 1363, 1649**
immunology, **2218**
information retrieval, **2754, 2755, 2768**
kidney transplant matching, **1362**
microcomputer applications bibliography, **2799**
neuron automated laboratory system, **241**
neuron model, **1922**
nuclear medicine, **524, 525**
occupational health studies, **797**
pharmokinetic data processing, **521**
phonocardiography, **3415**
pneumoconiosis detection, **245**
prescription writing, computer-assisted, **3412**
prosthetic arm control, **2223**
renal system calculations, **532, 798**
report generation, **1929**
report processing, **1361**
reproductive process Monte Carlo models, **802**
respiratory system
chest radiograph analysis, **2802**(B)
closing volume determination, **2220**
skeletal form analysis, **2766**
smoking/mortality analysis, **243**
sperm cell motility evaluation, **1919**
suicides, identification of potential, **1927**
therapy selection, **800**
thyroid assay simulation, **1918**
toxicology studies scheduling, **1928**
Memory *see* Associative memory; Buffer memory; Data storage; Digital computer memory unit; Holographic memory; Magnetic recording of data; Mass memory; Optical memory; Read-only memory
Metallurgy
diffusion processes simulation, **212**
optical emmission spectra data processing, **3054**
x-ray fluorescence analysis, **503**
Meteorology
baroclinic oceans model, **1062**
climate dynamics research, **1935**
data acquisition system, **1064**
data entry display, **805**
flux formulations, advection treatment in, **1063**
global weather data processing system, **246** to **251**
primitive equations in polar regions, **2489**
storm surge simulation, **1653, 1654**
telemetry data simulation, **2771**
vortex boundary layer flow model, **2772**
wind flow field analysis, **2227**
wind measurement, **3086**
Microcomputers, 1411, 2677(P), **3306, 3308**
applications
avionics, **1627, 3045**
bilbiography, **2799**
communications, **1000**
bibliography, **2728**
diffusion equation solution, **2129**
laboratory, **2789**
arrays of, **1282, 2130**
bibliographies, **2675, 2676**
central processing unit, **2131**
developments forecast, **1113, 2525**

ocomputers—*cont.*
ation in, **3038, 3039, 3041, 3042**
ator, for, **970**
utopilot, **202**
t/output, **964**
ory, **964, 2415, 2683**
oprogramming, relationships with, **3010**
ule interconnection, **2145**
iprocessor systems, **1267, 2129, 2418**
tion of, **2261**
dards, **1407**
ng, **1868**
oprogramming, 2134
ess modification, **168**(P)
itecture definition by, **1270**
puters, **464**(P), **971, 978**(P), **2423**(P), **2424**(P), **2425**(P), **3322**(P)
rol units, **972**(P), **2416, 2421**(P)
ation in, **3043**
r detection, **3320**(P)
t/output, **2144**(P)
preter implemented by, **2127**
ory, **3016**(P)
ad-only, **721**(P)
ocomputers, relationships with, **3010**
tiprocessor system, **974**(P)
ng, **2430**(P)
ication and validation, **1583**
tary
Force
rial combat simulation, **539, 540, 541**
rbase damage assessment model, **1365**
omb impact distributions simulation, **806**
mputer system acquisition, **534**
mputer usage forecast, **1366**
obal weather data processing system, **246** to **251**
an-machine system simulation, **538**
rogramming language standardisation, **440**
bmarine locating system simulation, **3420**
mand and control systems, **535, 1368, 3089**
puter developments, **2229**
puter procurement, **304, 2264**
sion aiding information system, **1367**
nce analysis, **1066**
lligence systems, **533, 2228, 2231**
ry
nti-air-warfare simulation, **256**
ersonal property movement management, **2722**
ersonnel assignment, **2775**
ersonnel system model, **1068**
ipboard distributed computing system, **255**
ipyard requirements planning, **3422**
ubmarine control system, **537**
gramming, **445**
ject planning and control, **2234**
otely piloted vehicle mission control system simulation, **254**
ech recognition applications, **3087**
ical data system
rogramming language requirements, **2407**
uery system, **253**
ical decision support system, **1364**
force decision aids, **1067**
ning: computer assisted instruction, **2207**
pons
dvanced medium calibre weapon model, **3091**
rojectile guidance simulation, **2230**
hell manufacture, **2490**
oftware management, **536, 1065**
oftware requirements, **941**
arget confidence region updating, **1938**
arget description, **1937**
varheads simulation, **3423**
also Games; Logistics; Missiles
nicomputers
uisition by military organisations, **2264**
lications·
ommunications, **1000**
aboratory, **2513**(B)
nanagement information systems, **2188**
liography, **9**
ver supply, uninterruptible, **2671**
gramming
COBOL, **2985**
perating system, **922**
hreaded code, **2127**
nimisation
strained, **48**

Minimisation—*cont.*
convergence and quadratic termination, **3213**
descent methods, **1483**
functions with values subject to error, **2570**
multivariate functions, **1741, 2068**
unconstrained, **1791**
Mining industry
coal mine structure analysis and design bibliography, **258**
coal reserve data mapping, **3093**
cross-pit conveyor systems simulation, **3092**
electric power systems
reliability and safety, **2494**
trailing cable fault location, **3076**
geologic map production for, **257**
ventilation system calculation, **3094**
Missiles
bibliography, **2178, 2179**
control computer for, **2462**
exhaust plume flow fields prediction, **754**
terminal homing simulation, **1069**
trajectory estimation, **2493**
MODULA programming language, **1226, 1239, 1246**
MU5 digital computer
communication system, **741**
name store, **2706**
Multics: security, **1866, 2265, 2519**
Multiplication, floating-point, **1503**
Multipliers
analogue, **2456**
digital
log-sum, **1287**
parallel, **3019**
serial, **3333**(P)
ternary, **326**
Multiprocessing systems, 459, 976(P), **2418, 2426**(P), **2678**(P)
applied to tree structured file searching, **2350**
asynchronous iterative methods, **1807**
cache system design, **1261**
data flow system, **1269**
fault tolerant system, **2674**
memory interference analysis, **158, 2133, 3307**
microprogram controlled, **974**(P)
network-oriented system, **1276**
parallel algorithms for, **405**
performance evaluation, **2527, 2528**
processor thrashing, **2091**
processor utilisation model, **1217**
program modelling, **1566**
reliability, **1587**
research system, **1263**
scheduling, **933, 1522**
largest processing time, **1496**
preemptive, **655**
simulation of, **2213**
Multiprogrammed systems
buffer memory system, **465**(P)
processor scheduling, optimal, **382**
queueing model of, **1560**
task scheduling, **2272**
Multistep methods
applied to
first order differential equations, **66**
initial boundary value problems, **65**
stiff differential equations, **124, 375**
nonlinear, **373**
generalised, **637**
linear, **65, 346, 374, 1166**
multiderivative, **67**
nonlinear, **124**
Multivalued logic, 3332
Music
computer assisted instruction in, **2735**
German folksong melodies analysis, **2794**
instruments, comparative study of, **2500**
musical perception simulation, **2245**

N

Navigation: microcomputer applications bibliography, **2799**
Negative-base arithmetic, 576
Netherlands
computer market, **306**
pollution economic analysis, **1037**

Networks, 1119
maximum flow problem, **3235**
representation of, **1204**
resource constrained network scheduling, **2931**
shortest path finding, **1778**
sparse networks, **649**
Nixdorf 88 digital computers, **193**
Nonlinear equations
continuous, **2916**
decomposition of, **359**
dependence of solution on parameter, **1743**
existence of solution, testing for, **2927**
Newton-like methods, **876**
secant method, **634**
stability, **1482**
Nonlinear programming
applied to
electromagnetic device production line optimisation, **2208**
geometric programs, **677**
boundary tracking algorithm, **2608**
global minimum finding, **2208**
sparse systems, **674**
NOVA 820 digital computer applied to hybrid computing, **1886**
NOVA 1200 digital computer applied to electrocardiography, **1061**
Nuclear science and engineering
bubble chamber picture analysis, **3424**
electric generating plant
computer control, **1346**
planning, **3081**
neutron transport, **1655**
photon transport, **1656**
reactors
abnormal behaviour recognition, **3425**
component inspection with computerised tomography, **808**
nonlinear fast reactor dynamics, **2776**
sodium-cooled fast reactor simulation, **542**
toroidal fusion test reactor calculations, **807**
transient dynamic analysis, **259**
sputtered copper isotopes angular dispersion simulation, **3426**
Number systems, 460
Number theory
algebraic number fields, finding units in, **2907**
amicable numbers, quasi-, **2326**
cubic fields class number determination, **2303**
cyclotomic fields, **1156, 1724**
Fermat's Last Theorem, **2307**
multiple integration number theoretic methods, **627**
partitioning of integers, **369**
perfect numbers, **1168**
primes, **60, 112, 316, 387, 1176, 1469, 2571, 2574, 2922, 2958**
quadratic fields class numbers, **87**
Numerical control, 1902
applied to
blocker die manufacture, **222**
lens production tools manufacture, **3387**
microcomputer applications bibliography, **2730**
program verification on automatic drafting machine, **2730**

O

Oceanography
computer programs, **561**
subsurface mooring sustems design and analysis, **286**
tides, **2510**
ODRA 1304 digital computer applied to superconducting magnet design, **3397**
Oil industry, 2717, 2720
Operating systems
command programs, **2169**
computer network, **1240, 2393**
correction system, **1247**
data base management system, **154**
development model, **424**
education in, **1843**
interactive terminals, **2638**
job control, **1002**
microcomputers, **922**
minicomputers, **922**
modular concurrent programming applied to, **1552**
multiprogramming, **1244**
protection system, **3002**
secure systems, **303, 437, 438, 452**
simulation of, **1843**
specification of, **415, 3304**
synchronisation, **416**
Operations research
applied to document indexing and retrieval, **2482**
programming language, **208**
Operator equations
compact, **64**
linear
noisy data, **2919**
second kind, **2028**
nonlinear: accretive operators, **2572**
projective approximation to solution, **52**
Optical computing, 838, 840
coherent optical processor, **1004, 1006**
spatial light modulator for, **1007**
computer hardware, **967**
holographic reflective lenses for, **2457**
hybrid processing systems, **1009**
incoherent optical correlator, **1005**
Optical memory bibliography, **1879**
Optics: lens production tools design and manufacture, **3387**
Optimal control, 770
Optimisation
cluster analysis applied to, **2583**
direct search method, **2080**
evolution strategy applied to, **2255(B)**
feasible direction method, **3209**
multiple response simulation, methods for, **1533**
parametric, **1513**
penalty function method, **1484**
stochastic, **668**
unconstrained
convergence, **3232**
factorised variable metric methods, **61**
Output
Chinese, **1880, 1881**
graphical, **733**
microfilm, **1293**
stream output procedures, **2444**
tactile, **1614**
users, effects of variables on, **2158**
voice, **1292, 1296**

P

Parallel processing, 1112
applied to
biharmonic equation, **105**
Poisson equation, **105**
quadrature, adaptive, **1783**
tridiagonal matrices, **1197, 1543**
bibliographies, **1585, 1586**
memory organisation, **1277**
scheduling, **126**
synchronisation, **2972**
Parameter estimation
from noisy measurements, **2195**
iterative, **673**
on-line, **2733**
recursive, **629**
Partition theory, 1752, 1784
PASCAL programming language
compiler, **1255**
code generation, **2377**
Concurrent, **1552**
extension for dynamic resource management, **2092**
extension by data types of mode relation, **3277**
procedures, semantics and proof theory of, **3276**
Real-Time, **955**
use in FORTRAN environment, **2399**
Pattern recognition, 333, 1716, 1720, 2011
applied to
aircraft identification, **334, 580**
carotid pulse waves, **530**
chromosomes, **1983**
electrocardiograms, **584**
pneumoconiosis, **245**
seismic waves, **1447**
spectral signatures, **41**
target acquisition and tracking, **2008, 2009**
terrain classification, **2546**
three-dimensional objects, **330, 859**
cellular logic array processor for, **860**
distorted patterns, **1135**
employing
affine transformations, **1446**

rn recognition—*cont.*
arge coupled devices, **33**
stering, **581, 863, 1451, 3194**
urnier descriptors, **1133**
zy decision trees, **582**
rning, **30, 1137, 3195**
unsupervised, **35**
ltiple correlation, **2897(P)**
arest neighbour classification, condensed, **37**
tical transforms, **868**
ursive partitioning decision rule, **1711**
nplate matching, **1713**
reshold-element networks, **36**
e automata, **1427**
re extraction, **32, 38, 39, 41, 43, 584, 864, 869, 1139, 1447, 1454, 2547, 2552, 3196**
active system, **1444**
lassification probability, **1450**
rmance evaluation, **2282, 2283, 2284, 2887**
ramming, **1144, 1443, 2295, 2296, 2297**
nguages, **455, 1442**
erating system, **1143, 1457**
time, **2552**
e description, **2895**
dards, **2555**
also Character recognition; Picture processing; Speech recognition
**8/e digital computer
ied to
emical reactor control, **509**
cture processing, **1618, 1619**
ramming: magnetic tape file manipulation, **1621**
**9 digital computer applied to
ork node usage monitoring, **1110**
ern recognition, **1444**
**10 digital computer
ied to
cture processing, **1622**
osthetic heart valve blood flow simulation, **1917**
ansportation system, demand-responsive, **1082**
munication with PDP 11/40, **1856**
ramming
mpiler testing, **3270**
mpiling, **1619**
agnetic tape file manipulation, **2455**
rtual memory system, **195**
**11 digital computer
lied to
mputer assisted instruction, **2206**
boratory applications, **2513(B)**
perm cell motility evaluation, **1919**
rgical patients' systolic time interval measurement, **1920**
xt processing, **2507**
puter network, **1278**
tal voice terminal diagnostic system, **480**
age to IBM 360/370, **1822**
gramming
LISS, **1832**
emory allocation, **1224**
MODULA, **1226, 1239**
perating system, multiprogrammed, **1244**
me-sharing system, **3364**
P 11/05 digital computer
lied to random number generation, **2060**
tron beam control electronics interface, **1613**
P 11/35 digital computer interface with Honeywell 635/6180, **2454**
P 11/40 digital computer
lied to
ehaviour analysis, **3105**
Chinese text processing, **1946**
eduction modelling, **3099**
mmunication with PDP 10, **1856**
gramming: virtual machine system, **2996**
P 11/45 digital computer
lied to
nimated videotape production, **1388**
ontrol robotics, **771**
ducation, **1339**
ong waveform analysis, **216**
attern recognition, **1144**
icture processing, **2291, 2292**
lant trial data handling, **289**
ollutant mass spectra interpretation, **1633**
andom number generation, **1775**
ystem identification, **2733**
work interface evaluation, **1111**
gramming

PDP 11/45 digital computer—*cont.*
BASIC, **1780**
operating system for interactive terminals, **2638**
PDP 11/50 digital computer
applied to text processing, **796**
graphics display system, **186**
programming
colour graphics display interface, **185**
data base management system, **154**
decision logic table preprocessor, **3285**
interactive graphics, **912**
PDP 11/70 digital computer, **2709**
programming: COBOL, **708**
PDP 12 digital computer applied to Russian character recognition, **1715**
PDP 15 digital computer applied to
information retrieval, **2754**
potential suicides identification, **1927**
Personnel
for digital computers, **1625, 3044**
data base administrator, **13**
data entry personnel, **1311**
production and employment of Ph.D.'s, **2175, 2714**
professional status, **1011**
programmers, selection of, **1887**
trade unions, **1011, 1012**
training, **1313**
selection, **290**
PERT, 2955
bibliography, **3052**
Photography
lighting system design for underwater photography, **1095**
orthophoto production from panoramic photographs, **1094**
stereo photographs digital processing, **1400**
terrestrial scene photographs, simulation of, **1092**
Physics
atmospheric, **1665**
Boltzmann's equation, **1070**
capillary surfaces approximation, **1657**
diffusion equation, nonlinear, **265, 267**
electromagnetic scattering, **1666**
electrons energy distribution, **550**
electrostatics, **814**
Fokker-Planck equation, **1663**
gravitational calculations, **2778**
Hartree-Fock equations, **549**
heat conduction, **3427**
lasers, **1077**
molecular dynamics, **262, 545, 1371**
plasmas
magnetohydrodynamic stability of, **2235**
simulation, **1373**
toroidal, axisymmetric, **1369**
Vlasov equation, **263, 1370**
plasticity problems, **3095**
radiation transport, **3428**
relativity, general, **268**
spectography, **2779**
thermodynamics
equation of state determination, **2724**
properties calculation, **1900**
transport integrals, **552**
wave propagation, **543, 553, 813, 1659**
x-ray diffractometer control, **2237**
see also Acoustics; Crystallography; Fluid dynamics; Nuclear science and engineering; Optics; Spectral analysis
Picture processing, 333, 1717, 2011, 2552, 2553, 2892
cellular logic array for, **860**
contour detection, **587**
degrees of freedom of sampled images, **2289**
digital image data base, **2294**
distortion correction, **862**
edge detection, **1149**
in noisy images, **40, 2890, 3197, 3202**
in textured environment, **34**
filtering, **1712**
for robotic systems, **330**
Gaussian models of images, **332**
hardware for, **215**
image quality evaluation, **870**
image restoration, **331, 588, 866, 867, 1440, 1539, 2005, 2285, 2548, 2549**
imaging system nonlinearity correction, **585**
interactive systems, **1618, 1622, 2003**
moving image tracking, **1130**
noise removal, **2884**
piecewise approximation of pictures, **1146, 1147, 1714**
programming, **1556, 1619, 2291, 2292**

Picture processing—*cont.*
quantification, **586**
reconstruction from projections, **866**
scene analysis, **42, 864, 1140, 1141, 1145, 1151, 1445, 2002, 2004, 2007, 2010, 2551, 2889, 2891, 2894, 2896, 3200**
segmentation, **1441**
shape discrimination, **1133**
stereoscopic image analysis, **2893, 2896**
storage of digitised images, **160**
symmetry detection, **1136**
template matching, **861**
texture analysis, **1448, 1710, 2293**
PL/I programme language, **136**
concurrent programming, **145**
program statistics, **690**
simulation, **2804**(B)
structured programming, **947, 1846, 3268**
user extension facilities, **146**
Plotting, 2159
contours, **108, 3257**
dashed lines, **84**
hidden-line, **1792**
raster, **2611, 2612**
three-dimensional, **397**
Poisson equation, 105
Policy analysis, 3115, 3125(B)
computer models for, **3101**
deduction model, **3099**
theoretical framework, **3110**
user interface, **3107**
energy policy assessment, **3104**
multiple goal problem, **3106**
needs satisfaction assessment, **3105**
nonroutine behaviour, **3111**
Pollution
air
mobile source pollutants control, **1673**
quality simulation, **2798**
wind flow field analysis, **2227**
input-output analysis of, **1037**
noise in urban communities, **283**
water
chemical plant discharge, **2189**
remote detection, **1051**
sea, pollutant dispersion in, **1088**
Polynomials
dyadotropic, **55**
exp-trig, **1481**
evaluation, **353, 592**
factorisation, **1187, 1729, 2170**
greatest common divisor, **1771**
Hermite, **2328, 3222**
interpolation, **353**
interval, **2019**
Jacobi, **599**
Laguerre, **2328**
matrix, **590**
determinant of, **1722**
piecewise cubic, **1154**
remainder sequence coefficient signs, **1208**
roots, **1159**
complex, **1767**
real, **2035**
sparse, **1694, 1721**
zero-free regions, **2023**
Predictor-corrector method for first order differential equations, **66**
Printers
bibliography, **997**
line, **998**(P)
optical, **188**(P), **3351**
page, **2163**(P)
types compared, **2693**
Printing industry
print quality evaluation, **583**
typesetting, **2505**
Privacy, 299, 842, 1109, 1116, 1118, 2267
feedback control system model of, **1104**
health records, **1681**
legislation, **837**
implementation by data base management system, **3130**
personal information classification, **1099**
Probability theory, 292(b), **2252**(B)
generalised definition of probability, **611**
Poisson probability function estimation, **607**
Problem solving, 2280
fuzzy problem representation, **1128**

Problem solving—*cont.*
multiprocessing organisation for, **1127**
Process control, 2196 to **2201, 2474**
interactive system, simulation of, **2475**
microcomputer applications bibliography, **2799**
on-line design of control system, **2731**
Production control, 2732
computer network for, **763**
systems analysis, **3060**
Production planning
crude-oil processing, **2717**
systems analysis, **3060**
Programming, 433, 694, 1248, 3435(B)
analysis of programs, **432, 441, 1229, 1551, 2395, 2634**
automation of, **921, 2403**
bibliography, **442**
backtracking, **412**
complexity of programs, **410**
computer network, **427, 1234**
conceptual programming, **2098**
control structures, **150, 412, 700, 956, 1553**
conversion of programs, **408**
correctness of programs, proving, **419, 439, 852, 1256, 1422, 1423, 1559, 1698, 2089**
costs, **534, 2806**
estimating, **301, 305**
data flow, analysis, **2387, 3266, 3294**
data translation, **1231, 2631**
deadlock, **701, 926, 3265**
debugging, **695, 1575, 2105, 2124, 2125, 2126, 2645, 2663, 3314**(P)
decision table, **1848, 3285**
documentation of programs, **1575, 2640**
editing of programs, **1574**
education in, **199, 1013, 2458, 2461, 3366**
error estimation, **2115, 3301**
error recovery, **3147**
error reduction, **414**
fault-tolerant software, **1230, 2408**
flowcharting, **931, 2090, 2973**
flowgraph structuring, **680**
garbage collection, **417, 2392**
hashing, **1555, 1841**
hybrid computer programming, **2713**
languages, **691, 2841**
access control facility, **148, 423**
artificial intelligence, **1241, 1992**
avionics, **2468**
business, **2187, 3373**
composite design facilties, **411, 2378**
computer aided design, **559, 1572**
coroutine control, **3275**
data languages, **142, 413, 683, 1250, 1576, 1826**
data types, **439, 1565, 2082, 2097, 2100, 2630, 2966, 2969, 3264**
design of, **2001**
bibliography, **451**
digital system design, **3286**
display, **153, 1245**
extensible, **146, 394**
history of, **426, 954**
hybrid computer, **1010**
implementation independent, **2633**
information retrieval, **2101, 2974**
bibliography, **517**
job control, **1588, 3269**
line-drawing processing, **2113**
logic design, **1702**
military, **152, 440, 2407**
nonprocedural, **903, 2388**
operations research, **208**
parallel processor, **2999**
pattern recognition, **455, 1442**
production systems, **3181**
protection, **430**
resolution logic as programming language, **1993**
roster of, **428**
semantics, **157, 572, 2274, 2834, 2966, 2970, 3276**
simulation, **943, 2629**
special purpose language design, **138**
specification language, **2409, 2410, 2656, 3290**
standards, **440, 2995**
statistics, **683**
string manipulation, **2665**
structured, **947, 2968**
syntax, **939, 1419**
test equipment language, **1863**
legal protection of programs, **839**

amming—*cont.*
es, program, **1765, 1820, 3281**
stic theory of program design, **2111, 2112, 2125**
processors, **927, 1233, 1833, 3295**
enance, **1408, 1410, 1562**
iography, **2404**
gement of, **957, 1686, 1687, 1953, 1960, 2094, 2268**
ry address trace data analysis, **949**
computer, **2707**
ls of programs, **2875**
lar, **2096, 2126**
ors, **1835, 2374, 2972**
eterministic, **3278**
isation of programs, **433, 2968, 3271**
aying, **2626**
g, **131, 141, 407, 689, 1821, 1828, 2971**
lel processor programming, **448**
el scheduling of programs, **16, 1842**
rmance analysis, **2389**
bility, **1403(B), 3003**
liography, **2975**
am generators, **421**
am synthesis, **1567**
am understanding systems, **1987**
rammable Algorithm Machine, **320, 321**
amming systems
mputer assisted instruction, **686**
nulation, **421, 431, 453, 943**
uctural engineering, **227**
erties of programs, proving, **1550**
ty control, **1228, 1235, 2989, 2994**
time, **2647**
sive programs, **699, 3148, 3152**
bility of software, **293(B), 709, 710, 1229, 1829, 1864, 2411, 2643, 2662, 3238**
bliography, **3283**
neory in, **2967**
ware data collection, **2116** to **2123**
ror data, **2998, 3138, 3298**
ware engineering, **156, 418, 434, 435, 921, 1569, 1570**
alised computer for, **3273**
dards, **145, 2640**
bliography, **2654**
ge allocation, **436, 951, 1224, 1544, 1845, 2086, 2652, 3287**
ctured, **150, 429, 435, 685, 934, 935, 936, 937, 958, 959, 960, 961, 962, 1236, 1547, 1846, 2124, 2125, 2624, 2648, 2809, 2810, 3268**
bliography, **3302**
bol state table generation, **1844**
bolic computation: bibliography, **1738**
bolic name usage control, **449**
hronisation, **1236, 1417, 1827, 2374, 2972**
em requirements analysis, **929, 932, 940, 941, 942, 945, 3300**
ng of programs, **1119, 1229, 2126, 2395, 2397, 2646, 2986, 2989, 3303**
st data generation, **409, 2375**
ng of programs, **2641**
sformation of programs, **693, 699, 702, 3289**
slator writing system, **3280**
ication of programs, **420, 435, 1256, 1999, 2088, 2270, 2406, 2649, 2966**
king sets, **948**
also Assemblers; Compilers; Interpreters; Multiprogrammed systems; Operating systems; *and specific computers, programming languages and programming systems*
ishing industry, 1327, 1386
zles, space-filling, **1986**

lity control, 644, 1235
stion answering systems: bibliography, **1355, 1356**
ues
nce in, **1515**
puting system models, **1776, 2065, 2672**
tiresource, **3200**
works of, **1515, 1776, 2672**
ulation of, **2073, 2942**

ar
raft identification, **334**

Radar—*cont.*
guided system for obstacle detection, **3102**
PPI scene simulation, **1399, 1401**
synthetic aperture image generation, **3368**
target tracking, **1091**
Radio
antenna
near-field power density prediction, **768**
radiation pattern calculation, **769, 2727**
reactively loaded aperture array, **1053**
selection for ships, **2190**
time domain analysis, **2729**
earth-ionosphere waveguide propagation calculations, **1334**
interference from airborne transmitters, **2192**
television: vestigial sideband system response calculations, **2472**
tropospheric transmission loss prediction, **505**
Railways
rail vehicle system dynamic response analysis, **554, 821, 822**
single rail vehicles dynamic analysis, **1083, 1084**
steel ingot trains operation simulation, **3097**
track support system analysis, **1944**
Random numbers
arbitrary frequency distribution, **2944**
combining outputs of different generators, **672**
delayed maximal length linear binary sequencies, **3250**
improvement of poor generator, **1775**
long-period generator, **651**
microcomputers, generator for, **1516**
minicomputers, generators for, **1516, 2060**
nonlinear cryptographic algorithm, **3244**
ratio of uniform deviates method, **2940**
testing, **678, 1802, 3261**
Raytheon 440 digital computer applied to automated laboratory for neuron studies, **241**
Read-only memory
bibliography, **730**
metal-oxide-semiconductor circuitry, **3338, 3340**
optical system, **3347**(P)
programmable, **2440**(P)
Recursion
elimination of, **2095**
iterative generation of recurrence relations, **619**
orthogonal expansions conversion, **636**
vector recurrence, asymptotic behaviour of, **1153**
Reliability
fault tree calculations, **288, 1397, 1949, 2278**
hardware, **1259, 1405, 2596**
multiprocessor systems, **1587**
random variable generation for, **2587**
redundancy, **1872**
software, **293(B), 303, 709, 710, 1405, 3138**
Residue number systems, 1193
Road traffic
control, **2239, 2240, 2241**
diamond interchange analysis, **2496**
incident detection, **1377, 1378, 1379, 1380**
intersection design, **1667**
management, **3429**
simulation, **1080, 1081, 1667**
vehicle use pattern simulation, **3430**
yielding-barrier damage analysis, **2498**
Robots: visual perception, 330
Rocket engines: nozzle stress analysis, **1629, 1630**
Runge-Kutta methods
combined with Galerkin method, **879**
implicit, semi-, **3206**
multiple, real eigenvalue, **365**
order attainable, **2561**
stability, **1487**
stiffness, **2071**

S

Scheduling
as graph transformation, **110**
computer facilities, **1685**
computing centre operations, **294**
parallel processors, **126**
tasks
nonidentical processors, **1506**
two identical processors, **2872**
worst case analysis of algorithms, **2960**

Security, 299, 842, 1102, 1107, 1118, 2267, 2512(B)
audit techniques, **2519**
bibliographies, **3217, 3218**
computer networks, **1262, 1265, 1959**
cryptographic techniques, **1180, 1265**
  standard, **1682**
data base, **1180**
  multilevel, **1221**
decentralised computing systems, nondiscretionary access control for, **3137**
evaluation, **2265**
integrity policies, **2523**
models, **3141**
multi-access system, **2077**
operating systems, **137, 303, 452, 2978, 2997**
passwords, **2521**
personal identity checking, **2522**
surveillance techniques, **2519**
take and grant system, **2386**
time-sharing systems, **1866**
vulnerability analysis, **1100**
Seismology
long-period seismic data processing, **2508**
seismic network evaluation, **1675**
seismic pattern recognition, **1447, 2552**
Sequences, longest common subsequence of, **1768**
Series
algorithm for summing, **892**
divergent series, partial sums of, **1160**
Set theory
adaptation of algorithm to application, **2359**
programming, sets in, **2967**
RE sets in, non-generable, **2848**
reducibility of sets, **317**
Shift registers
bibliography, **979**
binary rate multiplier, **1599**
employing
  magnetic bubble domains, **980**(P)
  transistors, insulated gate field effect, **3335**(P)
Ships
bulkhead design, **830**
computer aided design of, **274**
computing systems for, **255**
design parameters analysis, **562**
draft calculation, **2784**
hull streamline calculation, **3117**
hybrid ship water resistance calculations, **833**
manoeuvring control system, **276**
motion prediction, **2497**
  in long-crested irregular waves, **1398**
planing-body problem, **832**
propeller/stern boundary layer interaction calculation, **2242**
shipbuilding, **1393**
stress calculation, **2784**
structural analysis, **1348**
structural seaworthiness calculation, **2800**
Shooting method for two-point boundary value problems, **2039**
Siemens 4004/55 digital computer applied to hyperbolic differential equations, **2347**
Sigma 5 digital computer applied to electrocardiographic analysis, **2650**
Sigma 9 digital computer applied to linear zero-one programming, **1763**
Signal processing
incoherent optical analogue techniques for, **1005**
minicomputer applied to, **3385**
special-purpose computer for, **2062**
SIMULA programming language, **151**
Simulation, 486, 1955
bibliography, **565**
digital, **3139**
  discrete/continuous, **2614**
  display, **3258**
  event scheduling, **2591**
  exponential delays, **113**
  of digital computers, **1580**
  of queuing systems, **2073**
  output analysis, **1739**
  probabilistic, **2252**(B)
  programming, **431, 453, 943, 1554, 2941**
    PL/I, **2804**(B)
  response optimisation, **918, 1533**
  sensitivity analysis, **2957**
  statistical techniques, **1183**
  stochastic, **118**
education in, **200**
SNOBOL programming language
patterns, **2373**
recursive facility, **1647**
SPITBOL, **1238**
storage allocation, **1845**
Social sciences
combinatorial connectivities in social systems, **3124**(B)
cybernetic analysis of societal systems, **556, 557, 558**
education in, **2734**
simulation of societal systems, **3115**
social indicator systems, **3113**
textual data processing system, **2793**
working and living conditions typology, **823**
world model, **558**
Sonar: long-range active system performance prediction, **2251**
Sorting, 659
array processor algorithm, **1520**
evaluation, **2066**
in paging environment, **3252**
insertion sort, **1746, 1779**
merging
  combinatorial, **86**
  polyphase, **1512**
  stable, **2070**
oscillating sort, **905**
stable, **2070**
testing, **1800, 2354**
Spaceborne computers, fault-tolerant, **3370**
Spectral analysis
data acquisition, **1076**
linear predictive
  multivariate, **917**
  univariate, **1530**
Speech analysis-synthesis system, 2885
Speech recognition, 336, 2011, 2888
bibliography, **1355, 1356**
distributed logic system for, **2290**
fuzzy sets applied to, **2550**
key word recognition, **335, 2554**
military applications, **3087**
multi-speaker system, **1150**
parellel organisation for, **1127**
phoneme identification, **1453**
speaker identification, **2550, 2886**
voiced-unvoiced-silence detection, **2883**
Spline functions
B-splines, **1507, 2064, 2609**
cubic, **88, 2905**
L-splines, cardinal, **595**
natural, **1526**
nonlinear, **1499**
Sport: bowling alley scoring system, **1390**
Stability, numerical, 2329
A-stability, **67, 340, 371**
differential equations, stiff, **371, 375**
inequality systems, **74**
Liapunov stability, **373**
multistep methods, **374**
  multiderivative, **67, 2924**
stiff stability, **2924**
Standards, 2, 1688, 1961
data element representations, **1409**
data encryption, **1682**
logic element graphical symbols,**1977**
microcomputers, **1407**
pattern recognition, **2555**
programming
  bibliography, **2654**
  languages, **440, 2995**
    COBOL, **133, 143, 569, 2991, 3000**
  network charts, **2640**
  structured, **145, 2809, 2810**
real-time systems, **841**
STAR digital computer, **2709**
STARAN digital computer
applied to matrix inversion, **1542**
data manipulator, **3012**
input/output, **1611**
multidimensional access memory, **1307**
programming, **448**
  language, **2999**
Statistics, 834(B), **1404**(B)
census data processing, **120**
cluster analysis, **602, 640, 643, 663, 907, 3245**
contingency tables, **1790**
  correspondence analysis, **631**

tistics —*cont.*
chlet distribution, inverted, **626**
riminant analysis, **638, 2951**
nt series analysis, **1540**
ma distribution, generalised, **396**
metric analysis of algorithms, **401**
ractive systems for, **2078, 3248**
mogorov-Smirnov statistic, **1795, 2055, 2930**
ar model fitting, **654**
uistics, **234**
rkov chains, tests for, **609**
ximum likelihood estimation, **605**
an of multiple stratified population, **594**
ltiple level analysis, **603**
ltivariate analysis, **406, 598, 656**
mality test, **3260**
nciple component analysis, **642, 661**
gramming, **646, 697**
anguages, **138, 683**
rogram library, **667, 1806**
k test, two-sample, **2333**
ression, **1220, 596, 1493**
listurbance estimates, **660**
imited dependent variable technique, **2369**
onlinear, **630**
idge, **620**
tepwise, **600, 3259**
mple surveys evaluation, **829**
mpling distributions, **666**
uential analysis, **664, 665**
nmetric stable distribution, **608**
riance ratio, **650**
riance reduction, **670**
uctural engineering
mposite structures analysis, **3078, 3406**
mputer aided design, **777** to **788**
nduits, **783**
ns, **781, 782**
thquake analysis, **787**
ite difference analysis, **228**
ite element analysis, **1058, 2480, 3405**
cture mechanics, **776**
me design, **786**
vity monoliths, **781**
eractive graphics, **788**
ibliography, **1683, 1684**
rine structures, **1348**
es, **748, 785**
gramming systems, **227**
nforced concrete structures analysis, **2211**
lls
analysis of, **1349**
spherical: buckling loads, **1913**
stress distribution, **1912**
nter gate analysis and design, **774, 775, 782**
nels, **783**
btractor, binary coded decimal, **470**(P)
ccessive overrelaxation method, symmetric, **1470**
rface fitting, 77, 122
mbol manipulation: bibliography, **1738**
stem identification, Z transform algorithm for, **652**

ble look-up, 2601
iwan: computer market, **11**
lephone systems
quencing of transfers from old to new switching facilities, **2725**
red program exchange, **2194**(P)
itchboard system evaluation by simulation, **214**
rnary arithmetic, 3242
LSA 200 digital computer applied to two-layer printed board feedthrough minimisation, **2741**
sting
mputer self-testing, **2430**(P)
ta processing units, **462**(P)
ta storage units, **731**(P)
ctronic assemblies, **3391**
egrated circuits, **3305**
ic analyser for, **1869**
crocomputer applications: bibliography, **2799**
croprocessor system for, **831**
ripheral devices, **1195**

Testing—*cont.*
plant test data handling, **289**
programming languages for, **1863, 3391**
Texas Instruments Advanced Scientific Computer
applied to random number generation, **3261**
programming: FORTRAN, **2658, 3363**
Text processing, 1389
bibliography, **2795**
Chinese text, **1946**
collation, **2246**
for periodicals, **1386**
interactive system, **2507, 3433**
maintenance manual updating, **1382**
text analysis, **279, 2793**
transcription of ancient texts, **791**
translation editing, **796**
Theorem proving
geometry, **1995**
hierarchical technique, **2001**
nonstandard analysis, **2279**
Presburger arithmetic, **3191**
recursive function theory, **3192**
resolution methods, **2000**
Threshold logic, 172(P), **3023**(P)
adaptive, **579**
Time series analysis
maximum entropy spectral analysis, **2361**
programs, **1215, 2617, 3253**
APL, **639**
FORTRAN, **1813, 2361**
Time-sharing systems
diffusion approximations applied to study of, **1525**
information science applications: bibliography, **231**
minicomputer, **1836**
queuing model of, **2065**
selection of, **8**
simulation of, **744**
Timetables, school, 220, 508, 2205
Tomography, computerised axial, **1087**
bibliography, **1933, 1934**
Topology, 3208
TR-20 analogue computer applied to systems simulation of on-line system identification, **2733**
Transcendental equations, 2920
Transport
air cargo data entry, **275, 1085**
airline reservation system, **2469**
bus management information system, **273**
demand responsive systems, **1078, 1082**
interactive graphics applications: bibliography, **1683, 1684**
planning, **1086**
refuse collection scheduling, **555**
shuttle system scheduling, **272**
system simulation, **1381**
Transportation problem
three-dimensional, **2582**
two-origin, **2948**
Travelling salesman problem, 902
heuristic search, **1991, 2936, 2943**
local search, **1498**
range-constrained, **1890**
Trigonometry: sine function approximation, **1769**
Triplex arithmetic, 2660
TX-2 digital computer applied to line-drawing associative processing, **1760**

U

UNIVAC 90 Series digital computers programming: COBOL, **454**
UNIVAC 1100 series digital computers
applied to
input-output analysis, **2721**
structural analysis, **227**
programming
FORTRAN, **953, 2982**
information management system, **1003**
PASCAL, **1255**
UNIVAC 1106 digital computer applied to Brouwer fixed-point finding, **49**
UNIVAC 1108 digital computer
applied to
geostationary satellites
earth footprint plotting, **3055**
terrestrial system interference resrictions checking, **3057**

UNIVAC 1108 digital computer—*cont.*
graphic line symbolisation, **1947, 1948**
initial value problems, **124**
linear equation exact solution, **2056, 2339**
photographic emulsion calibration for spectrographic analysis, **2779**
point positioning from satellite observations, **1316**
wall fire endurance analysis, **3396**
programming: VULCAN, **2665**
UNIVAC 1110 digital computer applied to
intelligence credibility analysis, **2228**
sonar performance prediction, **2251**
UNIVAC 1219 digital computer digital voice terminal diagnostic system, **480**
UNIVAC 9300 digital computer utility programs, **194**
Universal logic, 1980
Universities
computer applications, **568**
management of computing resources, **2807**
USSR computer industry, **2266**

V

Vector analysis, 364, 624
Vector computers, 119
applied to full systems of simultaneous equations, **1214**
dissection algorithms for, **395, 2965**
Vehicles
braking performance prediction, **1911**
handling hybrid simulation, **1910**

W

Walsh transforms
Walsh-Fourier, **3249**
Walsh-Hadamard, **2062**
Wave equations, absorbing boundary conditions for, **2898**

Z

Zeta functions, Hurwitz, **79**

AUTHOR INDEX

H. J. van der 1678
tt, F. W. 189
tt, R. P. 452
J. F. 3236
ms, M. D. 163 2445
son, D. T. 398
rman, D. L. 448
rman, L. J. 2725
n, Y. 1088
nek, J. 2858 2862
nowicz, M. 378
ns, J. M. 1553
ns, M. J. 511
ario, L. R. D' 1942
yman, A. M. 826 1013
..... 1670
yman, H. R. 1013
man, N. 2978
lphson, D. L. 1518 2948
T. 1690
wal, R. C. 1510
arwal, J. K. 1130 3195
..... 3200 3228
awal, D. P. 1973
awal, J. P. 1287
awala, A. K. 1270
D. H. 1115
aad, A. 1344
aad, M. 607
, A. V. 314 681 3267
ens, W. 494
ja, N. 1146 1147
en, R. C. 3382
l, T. J. 1521 1786 2390
rs, L. A. 3063
erman, N. 222
ma, H. 2193
t, J. W. 901
er, T. J. van den 529
ddin, M. 966
ertolli, W. R. 2715
erts, D. S. 1228
recht, P. 2569
ock, D. 2803
Feld, G. 2576
xandridis, N. 1145
onseca, M. 2084
ord, E. C. 2475
ord, M. W. 941 3300
azi, V. R. 117
F. 2287
dredge, J. R. 3121
en, R. A. 3323
wood, R. J. 1403
nso, S. 2735
in, J. A. 2843
an, T. 222
man, E. B. 380
on, D. A. 3159
vine, D. O. 2165
ann, W. 1977
ano, N. 3395
es, S. R. 1866
ies, G. 2744 2745
..... 2746 2747
ir-Ebrahimi, K. 762
mann, U. 2377
os, D. E. 2048 2053
sler, L. C. 1916
dersen, O. W. 3070
derson, D. H. 2309 2310
derson, D. R. 1268
derson, G. A. 2436
derson, G. L. 331
derson, H. D. 444 2348
derson, J. A. 803
derson, M. 839
derson, M. R. 1789
derson, O. A. 1369
derson, R. E. 2734
derson, R. H. 1295
derson, R. K. 1846
Anderson, T. E. 1366
Anderson, W. 1861 1862
Anderson, W. D. 203 204 205
Anderson, W. E. 3026
Anderson, W. L. 1666
Andreassen, D. O. 384
Andrews, D. M. 959 960
Andrews, H. C. 2553
Angell, I. O. 1176
Angelo, H. D. 1174
Antiporta, D. B. 2186
Anway, M. D. 1957
Anzelmo, R. H. 2708
Aoshima, K. 1414
Apostolakis, G. E. 1949
Appel, A. 90
Appelbaum, J. 2208
Appleton, J. H. 2735
Applin, K. 1937
Apt, K. R. 3276
Arantes e Oliveira, E. R. de 546 1912
Arany, I. 1179
Arbib, M. A. 328 2824 2834
Archer, D. 2917
Archibald, J. A. 1227
Arcone, S. A. 2209
Arden, B. W. 296
Argentina, F. 2065
Ariyoshi, H. 2915
Armstrong, R. D. 2015
Arnold, A. 2847
Arnold, G. 2732
Aronson, J. 3254
Arthur, R. M. 3084
Asaki, A. E. 3118
Asano, C. 800
Asano, T. 311 3395
Ascher, U. 2030
Ashany, R. 378
Ashcroft, E. A. 1550 2388
Ashenhurst, R. 1056
Ashjaee, M. J. 3190
Ashkar, G. P. 587
Ashley, J. R. 767
Ashton, W. D. 779 786
Astrahan, M. M. 142
Atanasiu, A. 2531
Athol, P. 1081
Atkin, R. H. 3124
Atkins, R. A. 1626
Atkinson, K. E. 1744 1754 2916
Atkinson, R. 2618
Atri, A. D' 3172
Attar, R. 2481
Atteia, M. 3207
Au, A. D. 1917
Auckenthaler, K. 294
Auerbach, K. 1325
Auerbach, M. 1266
Ausiello, G. 3172
Aust, R. J. 220
Austin, B. J. 740
Austing, R. H. 748 3040
Avdelas, G. 356
Avedon, D. M. 1293
Avison, D. E. 837
Avizienis, A. 457 1259
Avrunin, I. L. 1855
Axelsson, O. 2024
Aylor, J. H. 3038

Babad, J. M. 662
Bacilieri, P. 3424
Backer, D. S. 2756
Backhouse, R. C. 3150
Backman, F. 1317
Bacon, D. W. 1404
Baer, J.-L. 459 1764
Baggot, J. D. 521
Bailey, H. H. 2008
Bailey, R. C. 673
Baille, G. G. 1280
Bain, M. 599 622
Baird, G. N. ..... 2977 2979 2980 ... 2985 2991 2993 2995 3000 ..... 3001 3003
Bajd, T. 244
Baker, B. E. 1253
Baker, B. S. 680
Baker, D. 2963
Baker, G. A. 56 58 1157
Baker, J. 2710
Baker, P. W. 171 487
Baker, S. M. 224
Baker, W. F. 3298
Bakker, J. W. de 3276
Balasubramanian, R. 198
Baldwin, D. B. 786
Bales, R. ..... 815 to 818
Ball, J. E. 427
Ball, M. S. 1255
Ballantyne, A. M. 2279
Ballantyne, J. G. 123
Ballard, K. C. 160 215
Balzer, R. 3290
Bandurski, A. E. .. 121 274 2362
Bandyopadhyay, A. K. 574
Bandyopadhyay, R. 761
Bandyopadhyay, S. K. 1548
Banerjee, J. 3284
Barak, A. B. 325 1978 3242
Barakat, R. 1663
Barbacci, M. R. 1264 1577 2419
Barbatu, G. 2720
Barbera, J. H. 968
Bargmann, R. E. 2078
Barker, P.G. 2174
Barker, T. S. 1039
Barker, W. C. 1330
Barnard, D.T. 1888
Barnas, R. E. 226
Barnes, B. H. 748
Barnes, J. J. 3344
Barnett, G. O. 1924
Barney, F. G. 1539
Barr, R. C. 242
Barr, R. S. 1805 1816
Barrera, R. E. 971
Barrett, H. H. 1087
Barrett, T. B. 2484
Barron, D. W. 1002 1780
Barstow, D. 1987
Bartels, C. P. A. 660
Bartels, P. H. 1649
Bartels, R. 1773
Barth, J. M. 2392 3294
Barto, A. G. 329
Barwell, V. 1759
Bass, A. 2798
Bass, J. N. 1665
Bass, L. J. 382
Bassir, R. 3416
Basu, M. S. 574
Batcher, K. E. 1307
Bates, D. L. 1110
Bates, L. 336
Bates, R. H. T. 867
Batson, A. P. 696
Batson, W. P. 916
Battiste, E. L. 2390
Baudet, G. M. 1807
Baudhuin, E. S. 3061
Bauer, F. L. 702
Bauer, H. R. 1181
Baum, R. I. 456 1582
Baumeister, B. 668
Baumol, W. J. 3131
Bavec, C. 663
Baxter, W. F. 202
Bayer, R. 2352
Bays, C. 100 1224 1775 2574
Beaureguard, A. A. 3138
Beauwens, R. 59
Bechtolsheim, A. 2418
Beck, G. G. 939
Becker, J. M. 1945
Beckley, R. F. 2754
Bedall, F. K. 656
Beddoes, M. P. 1296
Bednarek, A. R. 2865
Beebe, A. 2710
Beek, B. 3087
Beeker, G. ..... 815 to 818
Beerman, T. H. 1928
Bekke, J. H. ter 413
Belady, L. A. 424
Belaga, E. G. 2812
Belford, P. L. 1861 1862
Bell, D. 1887
Bell, J. B. 3046
Bell, P. D. 1947 1948
Bell, R. M. 2792
Bell, T. E. 929
Bellacicco, A. 653
Belz, F. C. 3297
Bemer, R. W. 2514
Bender, E. S. 3118
Bender, T. K. 2788
Bendiner, D. J. 2617
Benhaim, N. 1639
Benham, R. D. 1010
Benjamin, A. J. 1290
Bennett, B. T. 948
Bennett, R. O. 1945
Benoit, J. W. 164
Benson, A. 2049
Benson, D. B. 1970 3161
Bente, J. 21
Bentley, J. L. 2934
Bentley, T. J. 1319
Benzon, W. 2757
Berar, U. 2787
Berendsen, H. J. C. 1371
Berg, E. 2508
Berg, J. L. 571
Berg, S. V. 1056
Berger, A. E. 2909
Berges, G. A. 1125
Berglund, L. 796
Bergstra, J. A. 2969
Berka, V. F. 2276
Berkowitz, R. S. 2725
Berman, A. 597
Berman, E. B. 2801
Berman, L. 1969
Bermudes, E. C. 2776
Bernard, D. 2260
Bernard, J. E. 1911
Berndt, H. 2134
Berning, P. T. 3296
Bernstein, A. J. 2092
Bernstein, N. 1836
Bernstein, P. A. 3221
Berra, P. B. 1542 1760 2348
Berry, G. 84
Bers, K. H. 583
Berson, B. L. 3122
Berstel, J. 2863
Berster, C. 871
Bertoni, A. 3170
Bertrand, G. 1930
Bertsch, E. 1243
Bezdek, J. C. 869 1359
Bhandarkar, D. P. 2133
Bhat, K. V. S. 318
Bhat, U. N. 1217
Bhattacharjee, G. P. 3222
Bhattacharyya, B. B. 1616
Bhavani, K. H. 1665
Bianchi, C. 764
Bianchi, R. J. 509
Biba, K. J. 2523
Bielenberg, K. 1883

Bienenstock, E. 2539
Bigg, R. W. 3356
Biles, W. E. 1533
Biller, H. 909
Billhardt, C. F. 222
Binford, T. O. 1055
Biolchini, P. D. 1315
Bioul, G. 3019
Bird, R. S. 2095
Birkenfeld, W. 605 639
Birolini, A. 2668
Birss, E. W. 1231
Birta, L. G. 431 745 1513
Bisbing, P. E. 1333
Bishop, P. B. 3011
Bitler, J. R. 3093
Bixler, D. C. 929
Bjerstedt, W. R. 1686
Black, R. K. E. 2806
Blackburn, F. 516
Blackburn, J. D. 1647
Blackman, M. 841
Blackstone, E. H. 2217
Blackwell, F. W. 2008
Blair, J. M. 71
Blake, I. F. 2512 3219
Blakemore, M. 261
Blanc, R. P. 163
Blanchard, L. 2188
Blandford, G. E. 258
Blatt, H. P. 628 635
Blattner, M. 2815
Blazewicz, J. 2931
Blazie, D. B. 2625
Bledsoe, W. W. 1999 2279
Bleich, H. L. 2754
Blin, A. 288
Blincoe, C. 1918
Bliss, J. C. 1292
Bliss, M. 2188
Bloom, H. M. 1576
Bloom, S. L. 1693
Blum, H. 1523
Blumenthal, A. F. 1131
Boas, P. van E. 3274
Boas, R. P. 1160
Bocker, R. P. 1005
Bode, A. 507
Bodenstab, P. R. 1856
Bodkin, R. G. 1031
Boehlje, M. D. 758
Boehm, B. W. 434
Boehmer, K. 2660
Boesch, F. T. 1549
Bohl, E. 1488
Bohm, C. 3174
Böhm, W. 1507 3434
Böhme, G. 1310
Bohn, P. F. 1910
Bohner, M. 583
Boldyreff, C. 238
Bolles, R. C. 1055
Bolstad, D. D. 3121
Bomzer, H. W. 1313
Bonczek, R. H. 2962 2964 3051 3081
Bond, J. W. 444
Bond, P. 3113
Bond, W. P. 2078
Bonde, G. J. 801
Bonney, M. C. 3098
Book, R. V. 3145
Bookstein, A. 2482
Boon, B. 560
Boor, C. de ... 47 128 1463 2064 2605
Booth, G. M. 1271
Booth, K. S. 392
Booth, T. L. 2537
Boren, H. E. 1211
Borgesen, P. 269
Boris, J. P. 81 1543
Bornstein, R. D. 1063
Borovec, R. 1358
Borovits, I. 1105
Bos, J. van den 1822
Bossel, H. ..... 3101 3104 3105 ... 3107 3109 3110 3111 3114 ..... 3115 3125
Bosten, N. E. 1786
Botting, R. J. 1766
Boulton, D. M. 1790
Bourgeois, F. J. 780
Bowerman, E. R. 2472
Bownds, J. M. 72 360
Boyd, D. W. 2035
Boyd, R. E. 3384
Boyer, M. 338
Boyer, R. S. 2104 3192 3234
Boyne, W. 1710
Brackett, J. W. 921
Bradford, L. G. 776
Brady, J. M. 2256
Brain, A. E. 1445
Bramble, J. H. 1162 1466
Brandenburg, F. J. 3146
Brandon, D. H. 1107 1403
Brandsma, J. R. 711
Branstein, A. G. 402
Brandt, A. 2317
Brandwajn, A. 1560
Branning, W. E. 2989
Brantman, R. 1218
Bratley, P. 2759
Braunstein, Y. M. 3131 3135
Bray, B. 1048 1049
Bray, D. W. 323
Brayer, J. M. 1418
Breeding, K. J. 580 2288
Brent, R. 399
Brent, R. P. 2902
Bresenham, J. 996
Breslow, N. 2769
Brauer, M. A. 3021
Brewer, J. E. 3025
Brewer, J. W. 2438
Brice, R. S. 2632
Bridgewater, G. J. 3055
Briggs, F. A. 1277
Bright, H. S. 1182
Briss, E. A. 2215
Britt, B. 2661
Broad, D. J. 2888
Brockett, R. W. 386
Brockus, C. G. 648
Brody, T. P. 3028
Broekhoven, L. H. 1404
Broere, J. 87
Brogan, F. A. 1349
Broglio, C. ..... 815 to 818
Bromberg, P. A. 1923
Bromley, K. 1005
Bronowicki, A. 554 821 822
Brooks, J. 1092
Brooks, L. O. 376
Brooks, N. B. 2987 2988 3292 3293
Brooks, W. D. 3301
Brookshire, J. R. 970
Brosgol, B. M. 2407
Brouckere, L. De. 3020
Broughton, M. B. 3386
Brown, A. W. 2173 3250
Brown, C. W. 1051
Brown, G. 336
Brown, G. D. 1950
Brown, G. G. 125
Brown, J. R. 3090
Brown, J. S. 1639 1903
Brown, M. 672
Brown, P. J. 1403
Brown, R. D. 3249
Brown, R. M. 1274
Brown, T. 1796
Brown, T. D. 1661
Browne, J. C. 1274
Browne, P. S. 1102
Brownlee, J. N. 2373
Bruce, B. 336
Brück, H. vor der 3141
Bruderer, H. E. 240
Brueck, D. M. 2195
Brugler, J. S. 1292
Brundage, R. E. 696
Brunner, H. 2906
Bruno, J. E. 773
Brusset, H. 547
Bryant, D. 788
Bryce, G. R. 697
Buba, R. E. 130
Buchi, J. R. 2874
Buck, J. R. 2475
Buckle, J. K. 146
Buckler, M. B. 1026
Buckless, B. P. 2332
Buckley, A. 2040
Buckley, A. G. 48
Bucy, R. S. 2709
Budach, L. 2827
Budsinski, R. L. 3287
Buell, D. A. 2921
Buhler, R. 646
Bui, T. D. 3206
Buijs, H. L. 965
Buiuca, A. 2720
Bukharajev, R. G. 2843
Bullen, A. G. 1081
Bullock, B. L. 1151
Bulmer, A. R. 2621
Bumgardner, C. Y. 153 1245
Bunch, J. R. 383 1172
Bunday, B. D. 825
Buneman, O.P. 2358
Buning, P. G. 2371
Burke, M. F. 2127
Burke, R. E. 283
Burns, A. D. 2974
Burns, G. 1688
Burns, I. F. 3300
Burns, J. C. 1389
Burr, W. E. 2419
Burris, H. R. 1265
Burstall, R. M. 699
Burton, R. 1639 1903
Burton, W. 1203
Burton-Hunter, S. K. 2760
Bus, J. C. P. 876
Busnardo-Neto, J. 1373
Butko, A. 568
Butler, C. L. 1017
Butler, J. T. 22
Butler, M. K. 1113
Buttner, M. 3233
Butterworth, R. W. 1068
Butterworth, W. J. 2159
Butzel, L. M. 749 750
Butzer, P. L. 591
Bux, W. 2697
Buzbee, B. L. 1461

Cabay, S. 364
Caddy, M. J. 1819
Cagley, E. M. 1003
Cairo, P. C. 2738
Calahan, D. A. ..... 119 1214 ..... 2371 3139
Caldwell, C. S. 51
Caldwell, E. W. 1148
Calligan, C. C. 1672
Callison, K. S. 8
Calloway, J. A. 2189
Calomeris, P. J. 1877
Calvez, L. C. 892
Calzolari, G. 764
Camden, R. S. 1612
Camp, J. E. 1054
Camp, W. V. 2060
Campbell, H. 2266
Campbell, J. M. 750
Canepa, M. 2674
Cannon, J. R. 2018
Cannon, R. L. 2246
Cannon, T. M. 332
Canosa, J. 1662
Cardenas, A. F. 376 898
Cardoza, E. L. 1237
Carey, B. J. 2763
Carlberg, J. R. 3352
Carlisle, J. H. 1322
Carlson, F. R. 647
Carman, G. 1619
Carmichael, J. W. S. 2486
Carpenter, B. E. 1838 2517
Carpenter, N. 2634
Carr, L. ..... 1640 to 1643
Carrie, J. R. G. 3411
Carson, F. P. 1004
Carson, J. H. 2366
Carson, R. 1060
Caruso, P. J. 1368
Caruthers, B. T. 3261
Carvalho, A. N. de 2236
Casajuana, R. 2084
Casasent, D. 868 1007
Case, R. 796
Casey, F. ..... 815 to 818
Casey, R. G. 141 3221
Cash, J. R. 619
Cassano, W. F. 2765
Cassidy, R. M. 505
Castelaz, P. F. 869
Castell, S. P. 94
Cate, E. G. 2050
Cato, C. 2321
Catt, I. 1596
Cattell, R. B. 1404
Caulfield, H. J. 840 995
Cavaliere, R. J. 3387
Cave, W. C. 133
Cecil, D. J. 750 751
Cederquist, G. N. 287 403
Cellary, W. 2931
Cenzer, D. 2848
Cernicica, P. D. 2434
Cerny, E. 3182
Chadwick, R. B. 2361
Chaitin, G. J. 2529
Chakravarty, I. 3203
Chamberlain, D. 2176
Chamberlain, P. 1048 1049
Chamberlin, D. D. 142
Champeaux, D. de 1435 1707
Chan, A. Y. 1535
Chan, D. S. K. 1537
Chan, R. K. C. 553
Chan, S. H. H. 522
Chan, S. P. 2334
Chandersekaran, C. S. 437
Chandra, S. 2885
Chandrasekaran, B. 2284
Chandy, K. M. 1274 1515 2447
Chang, C. L. 2072
Chang, D. Y. 2149
Chang, F. C. 1728
Chang, F. W. 3379
Chang, H. 3228
Chang, L. C. 3123
Chang, R. L. P. 582
Chang, S. -K. 759 1358 2073
Chang, T. S. 1697
Chang, Y. 1863
Chao, Y. ..... 815 to 818
Chapman, C. E. 534
Chappell, D. P. 3047
Charniak, E. 1989
Chartres, B. A. 346
Chasen, I. J. 1392
Chattopadhyay, D. K. 574
Chawla, L. M. 369
Chawla, M. M. 2025 2575
Che, H. 1863
Cheek, J. B. 777 779
Cheeseman, H. 2999
Chen, C. 1700
Chen, C. H. ..... 43 1142 1144 ..... 2011 2552
Chen, N. 2912
Chen, R. 735 830
Chen, S. C. 105 3183
Chen, W. T. 409
Chen, Z. 2887
Cheng, C. Z. 263
Cheng, D. K. 1492

g, W. H. 1358
ton, D. 351
niavsky, J. C. 432
ey, D. M. 2508
ng, T. Y. 2044
nix, C. 2277
n, K. 3024
n, M. J. 3394
F. Y. 353 2853
J. S. 452
al, J. P. 576
n, W. C. 1075
n, D. 2719
nolm, D. 2247
, W. W. 1545
ura, L. J. 1866
in, A. J. 551
n, S. M. 1425
adhury, A. K 574
w, W. K. 1130
w, W. M. 1545
y, D. M. 1756
y, S. 2368
stian, T. 2724
stiansen, R. W. 2554
. B. B. 1397
. W. W. 1198
, Y. 1273
ang, S. L. 2800
i, C. K. 1171
ng, J. 159
ng, K. C. 2914
rchill, W. D. 782
til, M. P. 3167
otti, G. 1371
tti, M. D. 767
ba, P. A. 3118
ent, M. 3046
banu, G. 2183
fi, G. 2273
ssens, G. 358
pp, J. A. 305
pson, P. 1191
rk, D. W. 928
rk, J. W. 2465 2466
rk, S. 2674
rke, M. R. B. 654
sen, R. J. 1733
dfelter, J. M. 3096
ugh, L. 1185
n, D. R. A. 2640
hran, W. J. 1394
ly, W. J. 2938
nen, E. 2963
nen, E. S. 1426 1699
nen, I. 268
nen, J. 2634 2959
nen, M. E. 2328
nen, S. 1206
nen, S. F. 2357
nen, V. 598
n, H. 55
beck, S. C. 3119
born, B. L. 1656
e, H. 2243
e, T. A. 2261
eman, D. 2356
eman, M. J. 734
eman, R. M. 2610
lins, A. 511
lins, S. A. 2780
liver, D. G. 1394
ombant, D. G. 266
on, F. C. 1267
quhoun, D. G. 1769
ner, D. 2340
nport, T. L. 2488
acordia, D. 2730
ley, W. C. 666
n, A. R. 1484
nnell, D. B. 1143 1457
nner, F. 203 204 205
nor, H. T. 773
rad, F. 232
rad, F. P. 3080
rad, V. 1470

Conte, S. D. 2175
Conti, D. M. 12 3132
Converse, R. A. 2110
Cook, C. 336
Cook, G. E. 2464
Cook, M. M. 2979 2980 2985 2991 3000
Cooker, H. S. 2763
Cooley, J. W. 1404
Coope, J. A. R. 1479
Cooper, J. W. 2513
Cooperband, A. 2661
Coppo, M. 3174
Corbett, C. 1882
Cordellier, F. 624
Cordonnier, V. 1871
Cordray, D. M. 1077
Cordy, J. R. 1888
Corinthios, M. J. G. 652 2062
Cornell, E. P. 3072
Cornett, J. B. 2681
Cornfield, J. 243
Corns, C. F. 779
Cornwell, B. 1385
Cornwell, K. 1385
Corrigan, A. E. 957
Corsi, P. 764
Cortes, R. 2076 2372
Corwin, G. W. 1211
Costantini, E. 2273
Cotton, I. W. 164 712
Couger, J. D. 2253
Courbis, R. 1027
Courcelle, B. 3148
Courtois, B. 1872
Cousin, R. 1871
Cox, S. B. 809
Coy, W. 2814
Coyle, T. H. 1293
Craen, J. Van 545
Craig, G. R. 710
Crain, M. J. 1067
Crandell, M. G. 2572
Crane, H. L. 1749
Cranley, R. 627
Crary, F. D. 149
Crawford, A. M. 512
Crawford, C. R. 633
Crawford, V. M. 2693
Crockett, P. W. 1933 1934 3419
Croisdale, D. W. 1625
Crombie, M. A. 1138 1400
Cromme, L. 2036
Cronin, J. E. 2740
Crooks, W. H. 3122
Crosland, A. T. 277
Cross, R. P. 450
Crouch, H. R. 2681
Crow, F. C. 2602
Crowder, J. R. 1613
Crowe, T. 837
Crowley, J. S. 1925
Crusey, J. L. 450
Csanky, L. 310
Culik, K. 3166 3239
Cullinane, T. P. 3108
Culpepper, L. M. 2077
Cumberland, J. H. 1023
Cummings, L. A. 281
Cunningham, R. J. 685
Curnow, R. P. 2806
Cusick, T. W. 1175

Daduna, H. 2866
Dahljelm, H. D. 1456
Dains, B. 788
Dalal, Y. K. 2136
Daly, E. B. 1953
Dam, A. van 2108
Damm, E. 1778 2477
Damm, W. 3152
Daniel, J. W. 109 1534
Daniel, M. 480
Daniel, S. L. 2048 2053
Danielsson, P. E. 2417
Dao, T. T. 3332

Daoust, F. 2793
Darlington, J. 699
Das, S. K. 1616 3208
DasGupta, S. 3075
Dassow, J. 2864
Dauchot, P. J. 1920
Dauer, J. P. 3050
Davarian, F. 2548
David, R. 3184
Davidson, E. S. 1277
Davies, A. M. 1791
Davies, N. R. 421
Davio, M. 3019
Davis, A. M. 199
Davis, C. G. 942
Davis, E. W. 2999
Davis, G. C. 2767
Davis, H. W. 835
Davis, J. M. 1781
Davis, K. B. 1364 1705 3089
Davis, L. C. 256
Davis, L. S. 1131 1136 1146 1147 1449 1501
Davis, M .R. 2263
Davis, P. J. 1421
Davis, R. 1412 1990
Davis, R. B. 2202 2203
Davis, R. M. 1118
Davis, W. A. 2276
Davison, R. A. 488
Dawes, N. W. 2393
Dawson, C. W. 3117
Dawson, J. M. 1373
Dawson, W. N. 458
Dax, A. 2322
Day, A. C. 83 2581
Day, J. D. 201
Dayhoff, M. O. 1330
Decina, M. 1770
Decoodt, P. R. 520
DeFanti, T. A. 1388
Defenderfer, J. E. 3311
Deissenberg, C. 3106
Dejka, W. J. 2525
DeVong, G. F. 2882
DeKleer, J. 1639
Delabre, M. 2226
Delobel, C. 3221
Delves, L. M. 599 622
Dembo, M. M. 787
Demerjian, K. L. 3053
DeMillo, R. A. 16 150 956 1698 3173
Demko, S. 2913
Dendy, J. E. 57 1460 1471
Denning, D. E. 2376
Denning, P. J. 2376
Dennis, J. E. 590
Denton, M. B. 1050
Deo, N. 1781
Depeyre, D. 547
Depeyrot, M. 2540
Derflinger, G. 600
Descloux, J. 885
Descusse, J. 2731
Desideri, J. A. 1372
Desjardins, R. 1190
Desper, C. R. 2237
Despres, R. 1302
Deuflhard, P. 887
Deusen, F. Van 1924
Deutsch, D. R. 569
Devenny, T. J. 301
Devillers, R. 3265
Devine, W. D. 1672
Devroyne, L. P. 15
Dewar, R. B. K. 1238
DeWoskin, R. 2764
Dezani-Ciancaglini, M. 3174
Diaconescu, G. 2212 2598
Diamond, P. 2335
DiBlasi, A. 749
DiCesare, F. 273
Dickens, B. 766
Dickmeis, W. 591
Dickson, R. 2228

DiDonato, A. R. 911
Dickhoff, H. J. 1497
Dieterich, E. W. 3162
Diffie, W. 1194
Dijkstra, D. 2308
Dikovskii, A. J. 3176
Dillard, J. W. 1332
Dillenius, M. F. E. 1015 1016
DiMasi, F. P. 1083 1084
Dingwall, A. G. F. 3306
DiPasqua, A. 2783
Dirilten, H. 1446
Dittrich, G. 2845
DiTucci, J. P. 1932
Divers, R. T. 1920
Dixon, E. R. 562
Dobkin, D. 386
Dobre, I. 2719
Dockhorn, H. D. 537
Dolan, J. P. 1318
Domingos, J. J. D. 2016 2236
Donaldson, J. D. 1726
Doncker, E. De 82
Dong, S. B. 776
Donnelley, J. E. 452
Donovan, J. J. 438 3279
Doran, J. 2244
Doran, R. W. 1838 2517
Dougalis, V. A. 56
Douglas, A. S. 1116
Downs, D. B. 806
Dressler, D. 780
Driessche, P. van den 3238
Driscoll, A. J. 1687
Du, M. W. 1880
Dubuisson, B. 863
Dubus, D. 853
DuChateau, P. 2018
Duda, R. O. 1129 1445
Dudani, S. A. 580
Duff, I. S. 354 1736
Duff, M. J. B. 860
Dugdale, S. 2203
Duin, R. P. W. 31 2282
Duket, S. D. 206 492 538 2614
Dunbar, T. L. 1861 1862
Duncan, D. D. 2780
Duncan, G. A. 1394
Duncan, W. L. 1575
Dunham, C. B. 1732 2068
Dunkel, L. 2683
Dunn, D. G. 749 750 751
Dunn, R. J. 367
Dunning, C. M. 1311
Dunworth, A. 2541
Durbin, J. R. 2325
Durham, S. D. 1775
Duris, C. S. 1730 2905
Dushane, T. 2613
Duta, L. D. 1792
Dutter, R. 1493
Dutton, R. W. 3329
Duval, A. 1047
Dworak, R. A. 3076
Dyer, M. E. 929
Dyre, M. H. 1644

Eade, D. J. 3263
Eastman, C. 1572
Easton, M. C. 948
Eckhardt, U. 69 2047
Edelberg, M. 1288 3237
Edwards, B. J. 894
Edwards, C. A. 71
Edwards, D. B. G. 741
Edwards, J. C. 3094
Edwards, R. E. 1626
Egan, B. A. 2798
Egashira, K. 3024
Ehrich, H. D. 2966
Ehrich, R. W. 2546
Ehrig, H. 2825 3158
Eilbeck, J. C. 813
Einarsson, B. 2604
Ein-Dor, P. 1105
Eisenstat, S. C. 150 956

Eisgruber, L. M. ... 758
Elam, J. ... 1818
Elcock, E. W. ... 1995 2254
Elden, L. ... 2560
Elder, A. S. ... 1814
Elder, I. T. ... 1655
Elgot, C. C. ... 2973
Ellis, I. R. ... 1
Ellis, R. G. ... 1362
Ellis, T. M. R. ... 2331
Elsaesser, U. ... 615
Elsasser, K. ... 543
Elshoff, J. L. ... 690 3268
El-Zorkany, H. I. ... 198
Emden, M. H. van ... 1993
Emerson, D. E. ... 1365
Emerson, M. J. ... 1028
Emery, J. C. ... 1056 2260
Emkin, L. Z. ... 774 775
En, J. ... 658
Enderle, G. ... 559
Engel, G. L. ... 748
Engelfriet, J. ... 3157
Engelken, E. J. ... 2487
Engelman, C. ... 2519
Engels, H. ... 2027 2047
Engels, J. ... 1071
England, J. N. ... 2889 2893 2894 2896 3032
Engquist, B. ... 2898
Enison, R. L. ... 1182
Enright, W. H. ... 669
Enslein, K. ... 1404
Enstrom, K. D. ... 1337
Epstein, L. A. ... 2438 3025
Erbe, R. ... 381
Erdman, H. ... 1927
Ericksen, J. H. ... 1941
Erikson, L. R. ... 950
Erikson, R. A. ... 3259
Erikson, W. A. ... 2989
Eriksson, J. ... 359
Erisman, A. M. ... 354
Erni, W. J. ... 3179
Errett, E. B. ... 3343
Eschenroeder, A. Q. ... 2798
Eseltine, R. T. Van ... 832
Esser, H. ... 2042
Estreich, D. B. ... 3329
Eswaran, K. P. ... 102 142 342
Etschberger, K. ... 1078
Evans, D. J. ... 1737 2049
Evans, G. A. ... 261
Evans, J. M. ... 2555
Evans, S. M. ... 2511
Evans, W. H. ... 1331
Even, S. ... 508
Eward, R. S. ... 2681
Ewens, P. M. ... 740

Fabri, J. ... 2069
Fabry, R. S. ... 2398
Fagan, M. E. ... 414
Fagin, R. ... 1821 3243
Fahrmeir, L. ... 629
Fairchild, B. Y. ... 3071
Fairhurst, G. V. ... 289
Fairhurst, M. C. ... 1709
Fairthorne, S. ... 1952
Fairweather, G. ... 57
Falconer, D. G. ... 808
Falk, R. S. ... 62 362 2909
Fambro, D. B. ... 2496
Fancher, P. S. ... 1911
Farag, R. F. H. ... 1444
Farden, D. C. ... 2327
Farhat, N. H. ... 1090
Farmer, K. B. ... 2325
Farnsworth, D. L. ... 1602
Fassel, W. ... 21
Fateman, R. J. ... 2933
Fay, M. ... 3280
Fayolle, G. ... 2448
Fegley, K. A. ... 2478
Feinler, E. J. ... 3 2805
Feldman, J. ... 427
Feldman, M. ... 1895
Feldman, R. ... 2334
Feldmann, J. U. ... 1645
Feldmeyer, B. A. ... 1956
Feldstein, A. ... 1153 1503
Feliciano, M. ... 444
Felix, C. P. ... 2094
Fels, W. ... 2177
Felty, J. L. ... 2407
Feng, F. H. ... 1148 3088
Feng, T. ... 1112
Fennell, R. D. ... 1127
Ferenczi, M. ... 3077
Ferguson, R. E. ... 3046
Fernandes, R. A. ... 3069
Fernandez, E. B. ... 110 1192
Ferrantino, J. R. ... 1082
Ferrie, J. ... 137
Fiala, F. ... 1763
Fichtenbaum, M. L. ... 2673
Fiduccia, C. M. ... 1413
Field, D. A. ... 2311
Figueredo, R. J. P. de ... 38 39 41 1137 1139 1454
Fikes, R. E. ... 1241
Filippi, S. ... 637
Filler, L. ... 749
Fimple, W. R. ... 549
Findler, N. V. ... 1436
Finfer, M. C. ... 2117 2118 2119 2122
Finin, T. ... 232
Finkel, B. ... 155
Finkel, R. A. ... 1055 2934
Finn, J. D. ... 1404
Finn, R. ... 2184
Finnila, C. A. ... 1260
Fino, B. J. ... 117
Firestone, M. A. ... 561
Fischbach, F. ... 193
Fischer, D. M. ... 3131
Fisher, D. A. ... 152
Fisher, E. G. ... 589 1148
Fishman, G. S. ... 678 1739
Fitch, J. ... 2639
Fitzgerald, T. J. ... 3379
Fitzwater, D. R. ... 1569
Fix, G. J. ... 3210
Fix, H. ... 1671
Flaherty, J. E. ... 1167
Fleischer, J. ... 1071
Fleischer, J. M. ... 3351
Fleischer, R. J. ... 957
Fleischner, H. ... 844
Floutier, D. ... 2277
Flythe, M. C. ... 2976
Foley, D. H. ... 1458
Folk, R. M. ... 1928
Follayttar, S. M. ... 1924
Fong, E. ... 3130
Fonti, L. ... 3424
Forbes, J. M. ... 914
Forbes, K. ... 938
Ford, B. ... 1403 1765
Ford, J. A. ... 1159
Ford, W. S. ... 1870
Fordon, W. A. ... 804
Foreman, T. L. ... 270
Forester, C. K. ... 811
Forsen, G. E. ... 1148 3088
Forseth, R. E. ... 806
Forsyth, O. F. ... 256
Fosdick, L. D. ... 684 1242
Foster, J. M. ... 1992
Foulkes, J. D. ... 1452
Fournier, M. ... 965
Fraenkel, A. S. ... 2481
Fraley, D. ... 17
Francez, N. ... 2620
Francis, J. ... 697
Francois, R. E. ... 1004
Frank, G. R. ... 1403
Frank, H. ... 2700 to 2704
Frank, H. J. ... 1562
Frank, O. ... 641
Frank, R. ... 1478 2562
Franke, H. W. ... 2786 3432
Frankel, R. E. ... 2245
Franta, W. R. ... 2055 2591 2592
Fratta, L. ... 2696
Frederick, B. ... 3344
Frederickson, E. L. ... 2767
Freedy, A. ... 1364 1705
Freeman, H. ... 1209 1210 1501 2113 2895
Freeman, M. J. ... 510
Fremond, M. ... 2032
Frey, L. E. ... 710
Frick, R. H. ... 2493
Fried, D. L. ... 2491 2773
Friedman, E. P. ... 1967
Friedman, H. G. ... 3365
Friedman, J. H. ... 1711 2934
Friedman, N. ... 3331
Friedman, R. B. ... 1609 2221
Fries, B. E. ... 1921
Fries, M. J. ... 2998
Fries, R. W. ... 40 2890
Fris, I. ... 3166
Fronek, D. K. ... 831
Frosini, G. ... 25
Frost, J. D. ... 3411
Frumkin, M. A. ... 2855
Fry, J. L. ... 809
Fry, J. P. ... 1231 3262
Fu, K. S. ... 333 804 1123 1133 1140 1141 1418 1425 1427 2010 2293 2887 2891 3194
Fuchs, H. ... 3247
Fuller, S. H. ... 2418 2419
Fullerton, L. W. ... 2938
Fung, F. C. W. ... 3396
Furtney, R. ... 2699
Fusaru, D. ... 2787

Gabelman, I. J. ... 2229
Gabow, H. N. ... 1524
Gaddie, T. ... 784
Gadeken, L. L. ... 1368
Gaertner, W. W. ... 2809 2810 3012
Gagliardi, U. O. ... 474 2996
Gagne, R. R. J. ... 1370
Gains, B. R. ... 579
Gait, J. ... 3244
Gaitanis, N. ... 1420
Gal, J. ... 2476
Galib, T. A. ... 1251
Galil, Z. ... 2880
Gallenson, L. ... 2661
Gallie, T. M. ... 242
Galloway, L. M. ... 258
Gammill, R. C. ... 1233
Gannon, C. ... 962 2987 2988 3292 3293
Gannon, J. D. ... 2630
Gaposchkin, E. M. ... 695
Gardiner, P. C. ... 1364
Gardner, J. A. ... 2740
Gardner, J. H. ... 266
Garey, M. R. ... 315 1752 2872
Garfinkel, D. ... 1165
Garner, H. L. ... 460
Garnett, J. M. ... 584
Garrett, H. B. ... 914
Garside, D. B. ... 3412
Gart, J. J. ... 2769
Garvin, D. ... 1331
Gasser, M. ... 1866
Gat, I. ... 687
Gates, D. C. ... 808
Gates, W. L. ... 1935
Gaubert, G. ... 267
Gaunt, D. L. ... 3308
Gaur, S. P. ... 2742
Gauthier, R. L. ... 2657
Gautschi, W. ... 2037 2932 2945
Gaver, D. P. ... 96
Gazdag, J. ... 1662
Geadah, Y. A. ... 2062
Gecseg, F. ... 2873
Gecsei, J. ... 3185
Gehani, N. ... 2097
Geismar, H. J. ... 2503
Gekeler, E. ... 65 879
Gelder, A. Van ... 698
Gelenbe, E. ... 2448
Geller, M. M. ... 1962 1963
Genin, R. ... 892
Gentleman, W. M. ... 1722 2626
Gentzsch, W. ... 53 625
Georg, D. D. ... 1516
George, A. ... 395 617 1511 1759
George, F. H. ... 836
George, J. H. ... 1632
George, L. L. ... 3116
Georgia, H. ... 2065
Gerace, G. B. ... 25
Gerami, C. R. ... 1327
Gerhart, S. L. ... 412
Gernert, D. ... 208
Gerritsen, R. ... 2128 2372
Gerritsen, S. M. ... 2205
Gersch, W. ... 1926 2216
Gerson, G. M. ... 13
Geschke, C. M. ... 2628
Gewald, K. ... 1547
Ghose, A. ... 2736
Ghosh, S. P. ... 2631
Gibbs, N. E. ... 1749 1750 1761
Gibson, J. D. ... 782
Gifford, D. K. ... 3009
Gignac, D. A. ... 400 2367
Gilat, G. ... 1072
Gilbert, B. K. ... 160 215
Gilbert, B. R. ... 1886 3037
Gilbey, D. M. ... 1958
Gilinski, R. ... 1861 1862
Gillespie, D. J. ... 552
Gillespie, D. T. ... 500
Gillespie, J. ... 2180
Gillis, B. ... 2710
Gillogly, J. J. ... 1295
Gillotte, M. J. ... 2291 2292 3088
Gilmartin, D. ... 1026
Gilson, J. R. ... 2997
Gimpel, J. F. ... 1549
Ginali, S. ... 1693
Ginsberg, A. S. ... 1921
Ginsburg, S. ... 1415 2815
Gitman, I. ... 2700 to 2704
Giuliani, O. ... 763
Glad, T. ... 2570
Gladstone, B. ... 2707
Glicksman, R. A. ... 2165
Glore, J. B. ... 1686 1960
Glorioso, R. M. ... 1267
Glover, F. ... 1199 1805 1816 2775
Goble, G. G. ... 1904 to 1907
Godliman, G. S. ... 734
Godwin, H. J. ... 1176
Goel, A. L. ... 2663
Goguen, J. A. ... 572
Golay, M. W. ... 1347
Golberg, M. A. ... 1474
Goldberg, J. ... 2661
Goldberg, M. ... 2302
Goldfarb, D. ... 61
Goldfine, A. ... 2926
Goldhirsh, I. L. ... 1060
Goldman, N. ... 3290
Goldner, A. ... 1519
Goldstein, A. ... 2570
Goldstein, G. B. ... 2613
Goldstein, I. P. ... 2111 2112 2124 2125
Goldstein, R. ... 1092
Goldsworthy, A. W. ... 938
Golestaani, S. J. ... 999
Golovcsenko, I. V. ... 2463
Gols, A. G. ... 1044
Golumbic, M. C. ... 86 1965
Gomez, D. S. ... 2784
Gonnet, G. H. ... 2600
Gonzalez, R. C. ... 3425
Gonzalez, T. ... 1496 2055
Good, I. J. ... 1984 1994 1997

enough, D. F. 939
enough, J. B. 445 1568
man, B. 232
man, J. W. 1006
man, R. 1503
win, D. T. 924
win, F. K. 1015 1016
win, R. M. 1046
e, W. D. 1316
aerts, H. G. 529
esch, J. 611 834
on, P. F. 2490
on, R. 1622
on, R. D. 1120
am, W. C. 1395
, M. L. 524
nski, W. J. 3199
nger, H. W. 308
ieb, D. 54
ireau, S. 1793
h, P. T. 867
ishankar, V. 1635
en, E. 3327
l, S. K. 2472
a, J. A. 2081
y, M. W. 1343
g, W. B. 109 634
am, I. 2501
am, S. L. 691
t, A. P. 1309
, A. H. 2886
, F. G. 18
, H. 784
, J. N. 102
, M. D. 2806
, M. M. 3129
, S. B. 1098
n, C. 1987
n, C. C. 928
n, D. G. 831
n, F. 232
n, I. 1048
nberg, D. P. 3236
nberg, H. J. 1204
ne, B. 2746 2747
nfield, H. S. 1917
nwald-Katz, G. 1387
nwood, J. A. 651
son, B. D. 1095
gory, T. 233
gory, W. C. 2390
bach, S. A. 2532
st, J. H. 1927
bin, P. J. 2169
s, D. 419 2089 2097
fith, A. K. 1382
fiths, L. 2699
fiths, M. 1403
fiths, P. P. 142
nes, R. J. 743
berg, M. 1437 2281
dea, S. 2716
hman, R. 1361
s, M. L. 1721
wold, R. E. 1403
chla, E. 297
eger, W. 2510
ff, B. De 2188
gan, J. R. 1403
hn, M. J. 1815
oms, D. W. 9 307 372 442
1 570 575 730 889 979 981
2 997 1126 1212 1213 1355
56 1585 1586 1683 1684 1738
79 1889 2178 2179 2363 2364
04 2479 2545 2654 2675 2676
28 2795 2799 2975 3052 3127
28 3255 3256 3283 3302
ot. A. W. De 3068
sch, H. R. J. 1103
sfeld, G. 1573
ssman, D. D. 107 1055
ssmann, W. 630
ve, D. E. 194
ber, E. 3100 3112 3115
nza, E. F. 335
Guancial, E. 3075
Gudes, E. 1180
Guido, A. A. 2243
Guillois, A. 267
Gunzberger, M. D. 2923
Gupta, A. K. 2217
Gupta, A. S. 574
Gupta, N. K. 528
Gupta, S. D. 1720
Gupta, S. K. 397
Guralnick, E. 2790
Gurtin, M. E. 3210
Gustafson, D. H. 1927 2221
Guthmann, D. 184
Guthrie, L. G. 787
Gutkin, C. E. 1921
Gutknecht, M. H. 2312
Guttag, J. V. 439 1565 2082
Guye, T. D. 705
Guz, B. Z. J. 1665
Gyergyek, L. 663

Haakinson, E. J. 2192 3055 3057
Haar, R. 2286
Haars, N. W. 2264
Habbema, J. D. F. 638
Haber, S. 2925
Habercom, G. E. 3404
Habibi, A. 2058
Hackbusch, W. 2347
Hadjidimos, A. 356
Haegemans, A. 2022
Haffner, F. 547
Hageman, R. K. 911
Hager, W. W. 217
Haggerty, J. M. 1857
Hagis, P. 2326
Hague, S. J. 1184
Haig, B. D. 1019
Hairer, E. 883
Hajek, O. 1481
Halatsis, C. 1420
Hald, O. H. 604
Halioua, M. 866
Hall, C. A. 1943
Hall, D. J. 1404
Hall, R. L. 788
Hallet, P. 352
Halliday, T. C. 2215
Halstead, M. H. 1120
Hamacher, B. 823
Hamacher, V. C. 1870
Hamada, S. J. 3383
Hamilton, J. D. 810
Hamilton, M. 1570
Hamlet, R. G. 139 2397 2646
Hammer, M. 1188 1248
Hammond, K. R. 1893
Hammond, W. J. 1386
Han, Y. W. 1428
Hanani, M. Z. 1667 1915
Handzel, J. 415
Hangelbroek, R. J. 2020
Hanglberger, P. 2083
Hankinson, J. L. 2220
Hannington, G. 196
Hansen, E. 349 877
Hansen, G. J. 955
Hansen, J. V. 210
Hansen, P. B. 1552
Hansen, W. J. 3365
Hanson, A. R. 42
Hanson, D. 2986
Hanson, D. R. 1845
Haqqani, M. A. M. 431
Harckham, A. E. 2258
Harding, G. W. 241
Hargett, C. M. 781
Haralick, R. M. 1556
Hardy, T. 1930
Har-El, J. 2850
Harman, H. H. 1404
Harmon, J. B. 1008
Harms, E. 1676
Harms, J. W. 1890
Harper, P. G. 1328
Harrington, J. J. 1022
Harrington, R. F. 1053
Harris, F. L. 3054
Harris, H. G. 1632
Harris, J. M. 269
Harris, L. R. 2214
Harrison, J. S. 1069
Harrison, J. T. 3423
Harrison, M. A. 1962 1963
Harrison, W. H. 2087
Hart, P. E. 1129
Hart, R. M. 3297
Hartfiel, D. J. 847
Hartley, H. O. 1404
Hartley, P. J. 77
Hartling, J. M. 1857
Hartman, J. K. 1685
Hartman, J. M. 3343
Hartmanis, J. 3180
Hartmann, C. R. P. 1876 3027
Hartog, H. den 1037
Hartson, H. R. 430
Harwell, K. E. 754
Haseman, W. D. 1185 2622
Hasselman, T. K. 554 821 822
Hassitt, A. 1885
Hastings, J. T. 134 1306
Hatmanis, J. 1969
Hattori, Y. 85
Haubitz, I. 2599
Hauge, J. H. 239
Hauptmann, H. 606 760
Haussling, H. J. 832
Havanur, S. K. 824
Haverkamp, R. 1489
Hawker, K. E. 270
Hawkins, J. H. 252
Hayashi, Y. 3196
Hayes, P. J. 2637
Hayes, R. E. 1067
Hayes, R. R. 1665
Hayes-Roth, F. 30 2290 2881
Hays, D. G. 2757
Healy, M. J. 1626
Heaps, H. S. 1223
Hecht, H. 3370
Heckel, P. G. 2449
Heethaar, R. M. 2219
Hehner, E. C. R. 1557
Heider, R. D. 2230
Heikes, R. G. 118
Heilberger, R. M. 697
Heiler, S. 645
Heimbigner, D. M. 3297
Heimerdinger, W. L. 1428
Hein, O. 902
Heinrich, F. R. 1262
Helfenbein, E. D. 1378 1380
Heller, D. 73
Heller, P. 2090
Hellman, M. E. 1194
Helppi, R. K. 2650
Helton, H. A. 3300
Henderson, P. B. 1417
Hendricks, W. J. 327
Henle, R. A. 467
Hennart, J. P. 352 1169
Hennicke, H. 1078
Henningan, K. B. 1620
Henrion, M. 1572
Henry, J. N. 2304
Hensley, W. R. 1453
Henson, G. W. 783
Herbst, H. 3342
Herling, G. H. 3261
Herman-Giddens, G. S. 242
Hermans, J. 638
Herndon, W. H. 3341
Herriot, J. G. 1526 1748
Herron, R. E. 995
Hershey, E. A. 940
Hertel, D. 1547
Hetrick, W. L. 710
Hewitt, C. 2412 2414
Heyweiller, J. C. 75
Heyl, C.v. 1637
Hickey, T. B. 3408
Hicklin, M. 1343
Higgins, J. C. 2184
Higman, B. 966
Hijden, P. van der 3104
Hikita, T. 1964
Hilberg, W. 14 175
Hilcoff, P. 3138
Hildreth, J. H. 1630
Hill, F. J. 1979
Hill, G. W. 2929
Hill, I. D. 2580
Hill, L. W. 1584
Hill, M. F. 1961
Hillion, P. 812
Hiltpold, W. R. 3344
Hinteregger, J. 2577
Hipkiss, V. E. 1000
Hirasawa, K. 2727
Hirsch, T. J. ....1640 to 1643
Hirschberg, D. S. 2816 3216
Hirschberg, M. A. 2603
Hirschfeld, T. 995
Hirschman, L. 1361
Hitchcock, P. 394
Hitchin, D. 930
Hitt, M. L. 130
Hittle, D. C. 3065
Hlavicka, J. 469
Ho, I. T. 467
Ho, S. F. 409
Ho, T. 493
Ho, W. 3341
Hoagland, A. S. 471
Hoare, C. A. R. 900
Hobrock, L. W. 160 215
Hocking, R. R. 1404
Hodge, D. C. 3087
Hodge, T. W. 3385
Hodges, D. A. 1281
Hodson, F. R. 2501
Hoehne, H. 1562
Hoehnke, H. J. 2854
Hoepkin, M. 3376
Hofer, E. 361
Hoff, G. 1873
Hoffman, C. P. 1602
Hoffman, D. W. 2251
Hoffman, R. B. 1018
Hofman, R. 259
Hofri, M. 1546
Hogarth, J. 2447
Hohmann, G. W. 1666
Höhn, W. 2031
Holas, A. 1074
Holborow, C. 1817
Holdsworth, D. 2396
Hollander, C. R. 1561
Hollowich, M. E. 3299
Holmes, F. E. 3331
Holmes, W. M. 2991 3000
Holmes, W. N. 934
Holsapple, C. W. 2962 2964 3051 3081
Holt, C. S. 1294
Holt, R. C. 1888
Holte, R. 2939
Holtham, W. J. 780
Holtz, M. H. 2782
Holyoak, J. G. 2723
Homan, P. 3263
Homer, L. D. 673
Hong, S. J. 19 895
Honig, G. 2569
Hoo, J. S. 1786
Hoog, F. R. de 347 2899
Hooker, W. R. 1069
Hopcroft, J. E. 1424 3180
Hopner, M. 3165
Hopper, K. 1838
Horino, H. 3395
Horning, J. J. 2461 2643
Horowitz, E. 439 1565
Horton, J. W. 221
Horvath, E. C. 655

Horvath, S. 2818
Horvitz, S. 840
Hoshi, M. 2063
Hoskins, W. D. 904 2568 2911
Hossfeld, F. 1205
Hotz, G. 2846
Houghton, P. 2766
Houle, P. N. 1665
House, D. R. 2291 2292
Housel, B. C. 2631
Houska, C. R. 502
Houssel, B. C. 97
Houstis, E. N. 2301
Houweling, A. 1037
Howard, F. T. 2318
Howard, G. T. 1685 2662
Howard, J. E. 154
Howard, J. H. 1515
Howard, R. A. 1338
Howden, W. E. 1229 2395 3303
Howe, R. E. 2774
Howington, L. C. 3425
Hoyt, P. M. 2980 2990 2991 3000
Hsiao, D. K. 430 456 1582 1874 2135 2655 3284
Hsieh, R. C. 525
Hsiung, J. 2963
Hsu, C. T. 2772
Hsu, D. A. 2191
Hsu, H. T. 425
Huang, C. C. 1303
Huang, H. K. 1363
Huang, K. T. 3399
Huang, T. S. 1140 1141 2010 2891
Huang, T. T. 2238 2242
Hubai, P. 3422
Hubbard, G. U. 3218
Hubble, E. N. 1398
Hudetz, W. 2941 2957 3104
Hudson, R. H. 740 2574
Huey, B. 1979
Huffman, D. A. 2002 2007
Hughes, W. C. 2437
Hugo, I. 2257
Hugus, D. K. 1940
Hull, T. E. 669
Hultz, J. W. 2015
Hummel, H. 686
Hummel, R. A. 1708
Hung, J. C. 1920
Hung, T. K. 1661
Hunt, B. R. 332 1440
Hunt, H. B. 309 1122 2271
Hunt, J. W. 1768
Hunt, L. T. 1330
Hunt, R. J. 780
Hunter, B. 1342
Hunter, G. 2444
Hunter, J. S. 2191
Hurlock, R. E. 512
Hurt, J. J. 1574
Hurwitz, M. M. 227
Husband, M. A. 2706
Huskey, H. D. 295 298
Huskey, V. R. 295
Hussein, M. F. 223
Hutchinson, D. R. 1806
Hutchinson, T. P. 2597
Huynh, D. 1298
Hwang, F. K. 1752
Hwang, K. 2350
Hyafil, L. 2269
Hyman, J. M. 882
Hyslop, J. 261

Ibaraki, T. 1514
Ibarra, O. H. 1496 1506
Ibbett, R. N. 2706
Ichida, K. 2343
Ichioka, Y. 2285
Ide, M. 2915
Ifantis, E. K. 616
Igarashi, Y. 2868
Igersheim, R. H. 1323
Iizuka, T. 3324 3326
Ikegaya, K. 3415
Ikram, M. 23
Ingemarsson, I. 1178
Ingle, A. D. 1587
Ingle, H. T. 3061
Inglis, J. 937 1403
Innes, D. R. 1828
Inoue, M. 2711
Inselberg, A. 88 3417
Ionescu, V. 2720 2787
Iri, M. 1414
Irish, J. D. 2617
Irons, H. R. 3026
Irvin, M. M. 2161
Irvine, C. A. 921
Isakower, R. I. 226
Iserles, A. 1158
Ishihata, K. 2406
Isom, L. S. 1610
Itai, A. 508 3251
Ito, M. R. 1787
Ito, T. 2950
Itoh, K. 2285
Iuzzolino, H. J. 555
Ivanov, I. N. 1020
Ivie, E. L. 3273
Iwata, A. 3415

Jack, L. A. 1428 1429
Jackson, J. Q. 255 290
Jackson, L. W. 340 364
Jackson, R. A. 1143 1457
Jackson, R. T. 2660
Jacob, G. 3143
Jacobs, L. D. 749
Jacobs, R. W. 3323
Jacobsen, R. T. 2724
Jacobsen, T. 2378
Jacoby, H. D. 3279
Jahanshahi, M. H. 3197
Jain, A. K. 32 677 1712 2284 2549
Jain, R. K. 2996
Jakl, V. 3167
Jambekar, A. 827
James, B. H. 784
James, C. E. 160 215
James, E. B. 682
James, T. A. 3138
Jandy, G. 3060
Janicki, R. 2875
Janko, W. 104 659 1746 1779
Jansen, H. 591
Jansen, J. K. M. 2353
Janssen, T. M. V. 3274
Jarvis, I. B. 2484
Jayne, R. A. 1368
Jeantet, N. 1047
Jefferson, D. K. 274 1811
Jeffords, R. D. 3161
Jeltsch, R. L. 67 1166 2924
Jenne, F. B. 3344
Jennrich, R. I. 1404
Jensen, E. D. 2436
Jensen, M. C. 2807
Jensen, P. S. 76 228 1222 1349
Jerri, A. J. 2306
Jespers, P. 3342
Jeter, E. L. 1629
Jiulio, S. de 2273
Johnson, C. 50 3095
Johnson, C. R. 1476
Johnson, D. B. 649
Johnson, D. S. 315 1752 2872
Johnson, E. H. 1916
Johnson, G. R. 1516
Johnson, J. H. 71
Johnson, L. A. 2980 2991 3000 3003
Johnson, P. R. 2664
Johnson, R. A. 560
Johnson, S. C. 681 1722
Johnson, T. H. 1369
Johnson, W. 2307
Johnson, W. S. 467
Johnston, R. L. 2900
Jojima, K. 800
Jolly, A. C. 207
Jones, A. K. 148 423 2418
Jones, A. U. 2075
Jones, B. F. 1634
Jones, C. 2735
Jones, D. D. 2499
Jones, H. W. 788
Jones, J. H. 3263
Jones, N. D. 1551 3144
Jones, W. E. 1664
Jones, W. T. 1644
Jong, L. S. de 2329
Jong, S. P. de 2187
Jonge, J. H. de 2435
Jordan, A. G. 3076
Jordan, A. K. 3363
Jordan, I. B. 1600
Jordan, T. M. 3428
Joreskog, K. G. 1404
Joseph, P. 3086
Joshi, A. K. 1966
Joy, W. N. 2371
Joyce, J. D. 1202
Joyce, P. 827
Joyce, R. R. 843
Ju, S. M. 1881
Judd, J. S. 112
Judlin, W. D. 785
Jura, S. 1286
Juslin, K. 1624
Justice, J. A. 2781

Kabir, A. F. 2211
Kacprzyk, J. 2954
Kaenel, R. A. 1390
Kafura, D. G. 1522
Kaganove, J. J. 1758 1801
Kagstrom, B. 1723
Kahlenberg, F. P. 284
Kahn, K. 2204
Kain, R. Y. 2436
Kaiser, C. 137
Kaiser, F. 3388
Kalan, J. E. 1204
Kaletzky, A. 1702
Kallman, R. 2930
Kalyayev, A. V. 197
Kam, J. B. 2349
Kaminsky, F. C. 2355
Kammerer, P. 1827
Kammler, D. W. 344
Kanal, L. 530
Kancler, H. C. 2462
Kandel, A. 20 26 2878
Kane, M. R. 3091
Kane, P. C. 1148
Kaniel, S. 2322
Kang, A. N. C. 2072
Kannan, K. 1582 1874 2135
Kanovic, M. I. 2819
Kaper, H. G. 2020
Kaphengst, H. 2839
Kaplan, D. J. 256
Kaplan, M. M. 588
Karafiath, G. 833
Karger, P. A. 1959 3137
Karn, R. 692
Karney, D. 2775
Karpinski, M. 2828 3126
Karplus, W. J. 1955
Karpovsky, M. G. 1505
Karpp, R. R. 3423
Kashyap, R. L. 1150
Kasik, R. P. 1251
Kastner, C. H. 1114
Kataoka, S. 468
Katcoff, J. 2959
Katerle, H. J. 2177
Katona, P. G. 1920
Katsui, A. 3024
Katz, I. N. 2480
Katz, R. 2806
Katzper, M. 1360
Kauffman, J. B. 1812
Kaufman, A. A. 1667
Kaufman, D. J. 1262 1325
Kaufman, L. 109 383 1172 2041
Kaufman, L. C. 1798
Kaye, T. L. 2708
Kazakos, D. 2951
Kazden, R. J. 2609
Ke, J. S. 1358
Kedem, G. 1563
Kedem, Z. M. 1459 3247
Keenan, R. J. 1910
Kehat, E. 92
Kehl, T. H. 2683
Keirstead, M. M. 1016
Keiser, B. T. 3061
Keiser, H. N. 1061 3413
Keller, A. 728
Keller, J. F. 3285
Keller, K. J. 3092
Keller, R. F. 1312
Kellogg, C. 379 1532
Kellogg, R. B. 49 798
Kelly, J. R. 1568
Kelly, P. W. 3426
Kemp, K. W. 234
Kendall, J. P. 3308
Kendall, R. P. 601
Kennedy, L. A. 3400
Kent, J. N. 1018
Kent, W. 385
Kerr, D. S. 2655 3284
Kerr, K. 521
Kerr, R. B. 106
Kerschberg, L. 391
Kershaw, G. G. 704 705
Kessels, J. L. W. 2374
Kessmann, R. W. 2239 2240 2241
Kestemont, E. 545
Ketchel, J. S. 1318
Keuk, G. van 1091
Khallaghi, M. T. 2753
Khanna, D. K. 1404
Khot, N. S. 3078
Kibbey, D. 2203
Kibler, D. 1510
Kieburtz, R. B. 2092 3224
Kilgore, G. A. 2137
Killeen, J. 807 1369
Kim, C. E. 1506
Kim, K. H. 1230 2408
Kimbleton, S. R. 1240 1536
Kinariwala, B. 318 3235
Kinber, E. B. 2869
Kinderman, A. J. 2940
King, J. 1990
King, J. T. 362
King, P. J. H. 1403
Kingma, Y. J. 527
Kinney, L. L. 1428
Kinsner, W. 1740
Kirchgaessner, M. 441 2662
Kirkpatrick, C. G. 2437
Kirkpatrick, D. G. 1459
Kirsch, R. 2555
Kirschner, I. 3397
Kirstein, P. T. 1110
Kishore, M. 1168
Kistner, W. 728
Kitahashi, T. 3395
Kittler, J. 2547
Kiwimagi, R. 2699
Kiyono, T. 2343
Kizawa, M. 2950
Klahr, P. 379 1532
Klaus, R. 3382
Klee, V. 3238
Kleijnen, J. P. C. 1183
Klein, J. W. 3069
Kleinrock, L. 482 1301 1581 2518

ail, K. N. 1143 1457
r, A. 1145 1443 1455
..... 2375
nan, D. 1199 1805 1816
..... 2775
, M. 244
T. H. 2437
A. 391
. A. van der 2541
ık, J. 1876 3027
R. 2857
f, W. 610 880
, B. 1225 1836
l, H. C. ... 1378 1379 1380
, P. J. 2081
, P. A. 3353
, G. 263
. G. D. 906
lton, K. C. 3350
., D. E. 954 2057 2607
..... 3227
vashi, H. 1298
vashi, Y. 1043 2711
H. S. 1180
K. 21
R. 3342
nan, G. A. 1527 2360
W. E. 838
ıdapani, K. L. 577 1432
schek, D. E. 2535
er, T. R. 262
g, R. A. 1305
g, S. A. 3066
n, R. A. 130 920
vi, Z. 322 1703
r, W. 483
r, W. H. 1267
, S. T. 3071
, D. P. 2953
F. 1631
eim, A. G. 3219
sford, W. L. 452
antellos, A. C. 1186
vnski, B. R. 493
elaar, H. 1794
n, I. 322 1703
. P. B. 1878
onen, J. 1648
G. A. 486
gi, Y. 856
h, T. C. T. 908
k, E. 469
L. T. 1646 2387 3241
ek, V. 2862
s, C. B. 616
oumjian, R. G. 769
lski, J. 521
s, W. 770
, D. 2482
y, M. F. 1276
se, K. W. 2436
se, P. C. 3069
s, C. E. 153 1245
mar, A. 2832
el, M. D. 501
ohm, H. 2458
h, J. 1902
d, J. A. 1066
wski, H. J. 2871
, R. 2025
inger, P. 203 204 205
, P. R. 2984
, H. D. 2739
el, R. 671
el, H. P. 3153
N. 78
ewicz, E. 1048 1049
J. P. 524
ger, M. J. 1611
ger, R. J. 3050
kal, J. B. 1404
, R. 3042
el, A. J. 443
cek, M. 1743
ra, L. 2946
er, V. B. 2233

Kuck, D. J. 105 1197 2149
..... 3183 3225
Kuehl, G. 1937
Kuh, E. S. 3394
Kuhner, J. 1022
Kuhns, J. 540 541
Kulkarni, A. D. 3214
Kullback, S. 243
Kundu, S. 1508
Kung, H. T. 405 1520 2269
..... 2831
Kuo, F. F. 1298
Kupper, T. 363
Kuriyan, M. 2444
Kurka, P. 2813
Kususa, T. 3064
Kuyvenhoven, A. 1042
Kydes, A. 532
Kyle, M. C. 530

Labetoulle, J. 2448
Labonte, R. C. 1584
Ladner, R. E. 2879
Lafrance, G. 814
Lakshmivarahan, S. 29
LaLonde, W. R. 3164
Lam, B. 618
Lam, C. F. 2942
Lam, D. C. L. 544
Lam, D. K. 2777
Lam, S. S. 213 655 2672
..... 2960
Lamport, L. 1422
Lampson, B. W. 2449
Lancaster, M. C. 1061
Lance, D. M. 2761
Lance, G. N. 135 1404
Lanciaux, D. 137
Land, F. F. 209
Landau, K. 566
Landauer, C. 516
Landis, D. 1601
Landsberden, J. M. 2805
Lang, T. 110
Lange, R. G. 2999
Langford, W. F. 2039 2319
LaPadula, L. J. 440
Lapidus, L. 2045
Lara, L. F. 792
Larsen, G. W. 3041
Larson, I. W. 253
Lasdon, L. S. 677
Latta, M. R. 3351
Lau, T. C. Y. 2573
Laughren, T. 1927
Lavenberg, S. S. 96 144
Lavington, S. H. 741
Law, H. Y. H. 3047
Lawler, E. L. 2584
Lawrence, V. B. 3224
Lawrie, D. H. 2149
Lawson, H. W. 1403
Lazak, D. 2205
Lazzara, A. V. 2783
Leach, G. S. 3343
Leaf, G. K. 2020
Leal, A. 1706 1936 3375
Leavenworth, B. M. 903 2645
Leavitt, M. B. 2768
Lebart, L. 631
Ledgard, H. F. 133 1419 2100
Lee, A. W. 1069
Lee, C. M. 2497
Lee, D. 124 245
Lee, D. T. 19 2949
Lee, D. T. W. 3012
Lee, F. M. 2490
Lee, H. S. 3339
Lee, K. -F. 235
Lee, K. L. 523
Lee, P. A. 262
Lee, R. C. T. 1451 1523 2072
Lee, R. E. 3327
Lee, W. N. 490 491
Lee, Y. W. 3253
Leer, B. van 1374 1375

LeFaivre, R. A. 1128
Legros, J. L. 1793
Lehman, M. M. 424
Lehmer, D. H. 2324
Lehn, W. H. 560
Lehoczky, J. P. 1525
Leinbach, R. C. 2768
Leinemann, K. 1089
Leith, E. N. 862
Lemkin, P. F. 1564 1573 1618
..... 1619 1621 1622 2455
Lemmond, C. Q. 2437
Lentini, M. 1491
Lenz, H. -J. 644
Leonard, A. S. 1931
Leonard, G. L. 734
Leondes, C. T. 773
Leong-Hong, B. 1865
Leppard, P. 2225
Leslie, S. A. 3355
Lesser, V. 2290
Lesser, V. R. 1127
Lether, F. G. 1173
Lev, A. 2005
Levek, R. 2744 2745 2748
..... 2749 2750 2751
Leventhal, B. 664
Leventhal, L. A. 964 2131
..... 3010 3039
Levin, J. Z. 1216
Levin, K. D. 1782
Levin, S. 3375
Levine, H. D. 2764
Levine, M. D. 2617
Levit, F. 3412
Levitt, K. N. 1559
Levy, A. F. 1928
Levy, L. S. 1966 2625
Lew, A. 1623
Lewin, D. W. 1702
Lewis, C. L. 1069
Lewis, J. L. 3120
Lewis, L. J. 1680
Lewis, P. A. W. 114 1404
..... 1540 1541
Lewis, P. M. 2936
Lewis, T. G. 2060
Li, D. W. 1267
Li, T. Y. 49
Lichtman, Z. L. 1831
Liebach, R. A. 1628
Lieberman, E. B. 1080
Lieberman, L. I. 2743
Lieberson, S. E. 1301
Liechti, C. A. 3327
Lientz, B. P. 1408 1410 3136
Lietz, J. C. 2291 2292 3088
Lin, A. T. 1373
Lin, B. W. Y. 2344
Lin, C. C. 3260
Lin, W. C. 2885
Lindahl, C. E. 955
Lindberg, D. A. 1052
Linden, T. A. 303
Lindenburg, K. 870
Linder, M. 1405
Lindgren, G. 2495
Lindsey, C. H. 1951
Lindt, W. J. van de 3368
Ling, W. H. 875
Liniger, W. 371 373 374 375
Linz, P. 2028
Liou, J. H. 1914
Lipkin, L. 1619 1622 3410
Lipo, T. A. 3072
Lipovski, G. J. 1282
Lipow, M. 710
Lipski, W. 3079
Lipton, R. 956
Lipton, R. J. 150 848 1698
..... 2275 2386 2986 2992
Liskov, B. H. 148 423 1248
..... 2618
Liu, B. 2059
Liu, C. R. 1055
Liu, D. 1348

Liu, J. J. 1492
Liu, T. K. 2544 3189
Liu, T. S. 581
Liu, Y. T. 1919
Livesey, D. A. 1032
Livingston, W. H. 3120
Livingstone, A. W. 3305
Lockemann, P. C. 564
Loeser, R. 695 1800
Loewer, O. J. 1394
Logan, R. S. 2207
Logie, D. M. W. 3429
Loh, S. —C. 793
Lohman, G. M. 2365 3246
Lonczak, J. 397
London, R. L. 147 422 703
..... 1850 1851 2400 2619
Long, A. B. 1346
Long, R. H. 3363
Longini, R. L. 1925
Lopes, J. M. B. 2248 2249
Lopez-Toledo, A. A. 799
Lord, G. 2326
Lord, R. E. 1781
Lorente, P. 2226
Lorenz, J. 613
Lorie, R. A. 102 142 2351
Loring, P. L. 440
Lortie, E. L. 501
Lory, P. 1497
Lott, R. W. 2999 3436
Lough, D. E. 2974
Love, H. H. 1260
Love, L. T. 3367
Loveman, D. B. 693
Low, J. R. 427
Lowden, B. G. T. 905 944
Lowe, T. C. 842
Lowery, C. L. 2008
Lowery, L. L. ..... 1640 to 1643
Lozano-Perez, T. 2210
Lozier, D. W. 1840
Lozinskii, E. L. 389
Lozy, M. el 1788
Lu, H. Y. 750
Lu, S. Y. . 1123 1427 2293 3194
Lubbes, R. K. 2611 2612
Lucas, H. C. 1406
Lucey, D. J. 3088
Luczak, R. W. 1943
Luebbers, R. J. 769
Lueker, G. S. 392
Luh, J. Y. S. 330
Luhmann, S. 1562
Luk, R. H. 214
Luk, W. S. 3217
Lum, V. Y. 97 2631
Lunde, A. 1272
Lunger, W. D. 915
Lusignan, S. 2759
Luss, H. 2725
Lutz, R. K. 3150
Luvisetto, M. L. 3424
Luzwick, J. 1053
Lybanon, M. 2332
Lyeria, J. R. 1898
Lynch, N. 1415 3156
Lyness, J. N. 1485 1758 1801
Lyon, L. E. 1885
Lytton, R. L. 1344

Maayan, C. 3409
MacAdam, C. C. 1911
MacAllister, D. F. 2935
McAulay, A. D. 3420
McCabe, T. J. 410
McCain, E. 2710
MacCallum, I. R. 944
McCann, A. P. 1238
McCarthy, D. P. 1196
McCaughey, D. G. 2289
McClellan, M. T. 2056 2339
McClimens, M. G. 3299
McColl, W. F. 1975
McCollum, P. A. 3043
McCorkle, J. W. 3026

McCormick, B.H. 1579
MacCracken, M. C. 1063
McCrea, P. G. 487
McCreight, E. M. 2971
McCreight, K. K. 2497
McCulloch, C. M. 257
McDaniel, J. W. 1396
McDermott, J. 1438
Macdonald, J. R. 2586
Macdonald, P. M. 820
McDonell, K. J. 1777
McDonnell, M. J. 867
Macera, P. A. 2611 2612
MacEwen, G. H. 1843
McFadden, F. R. 2253
McGee, W. C. 2381 to 2385
McGettrick, A. D. 2737
McGhee, R. B. 580 1923
McGibbon, T. L. 455 871
McGinnis, A. C. 2805
McGlaufin, H. R. 1376
McGowan, C. L. 1568
McGreavy, C. 3381
McGregor, D. R. 458
McGuire, G. R. 813
Mach, K. D. 2961
McHargue, W. R. 1715
McHenry, R. R. 2498
MacInnis, P. J. 2650
McIntosh, C. L. 1916
Mack, J. L. 1221
McKay, D. 2090
Mackay, M. 2354
Mackay, N. A. M. 3102
McKean, J. W. 2333
McKee, J. M. 2609
McKee, J. W. 3195
McKeeman, W. M. 1986
McKenzie, B. J. 549
McKenzie, L. E. 3035
McKinney, M .H. 3186
Mackworth, A. K. 2004
McLafferty, F. W. 1633
McLain, D. H. 93 2331
McLaughlin, H. W. 875
McLean, E. R. 1326
McLeod, D. J. 1531 1929
McMasters, G. E. 904
McMenamin, J. 236
Macnaghten, A. M. 900
McNamee, L. P. 195
McNeill, G. 1047
McNemar, J. 1817
Macomber, C. E. 3085
McPherson, M. F. 819
McVey, E. S. 33
Madala, R. V. 1062
Madden, M. 2506
Madni, I. K. 3403
Madnick, S. E. 438
Maegaard, B. 237
Maekawa, M. 3309
Magill, C. R. 1119
Maglione, V. P. 820
Magnuson, R. A. 3295
Mah, C. 516
Mahendrarajah, A. 1763
Mahmoud, M. S. 1336 3058
Maibaum, T. S. E. 1968
Maier, H. H. 2503
Mairson, H. G. 2958
Majda, A. 2898
Majithia, J. C. 170
Majumder, D. D. 2550
Majumder, K. L. 3222
Malack, J. A. 3384
Malcolm, M. A. 1499
Mallach, E. G. 1841
Malmberg, A. F. 1057 1252
Malmberg, P. R. 3028
Malvania, N. 771
Maly, K. 2591 2592
Mamrak, S. A. 675 2345
Mancini, A. J. 218
Mandell, R. L. 1240
Mandl, C. 2565
Manes, E. G. 2824
Mankoc-Borstnik, N. 264
Mann, W. F. 1276
Manna, Z. 852
Manning, F. B. 2666
Manola, F. A. 1250
Manrique, R. 2510
Mantel, F. 2017
Manteuffel, T. A. 3215
Mar, J. W. 1014
Marbach, C. B. 1165
Marble, K. D. 1924
March, S. T. 3229
Marcus, R. S. 3407
Märgner, V. 2003
Marin, M. A. 3182
Marinos, P. N. 3188
Mark, A. 1835
Mark, L. 2739
Markel, J. D. 2886
Markowsky, G. 3241
Marks, P. W. 779
Marquardt, M. B. 2509
Marr, D. 859
Marr, F. C. 2262
Marr, H. E. 503
Marron, B. 1865
Mars, P. 2173 3250
Marshall, G. E. 3004
Marshall, J. R. 534
Martin, B. 137
Martin, D.J. 1393
Martin, F. J. 1300
Martin, J. D. 3093
Martin, R. L. 513
Martin, W. N. 3200
Martin-Vega, L. A. 126
Martine, J. E. 1538
Martinek, J. 2857
Maruyama, K. 103 1494 2696
Marver, J. M. 28
Marx, E. 402
Marx, K. D. 807
Maryanski, F. J. 2537
Masetti, M. 3424
Mason, J. D. 3300
Mason, P. H. 1566
Mathey, D. G. 520
Mathon, R. 2900
Matick, R. E. 3437
Matinopoulos, G. 1664
Maton, J. 1040
Matte, J. -P. 814
Matteuzzi, P. 3424
Matthew, G. 2922
Matthys, J. 341
Maud, A. 1875
Maurer, H. A. 3239
Mauri, G. 3170
Mavrides, L. P. 3209
Maxfield, J. E. 369
Maxson, C. J. 847
Maxwell, P. C. 487
May, D. B. 778
Mayer, R. J. 2090 2473
Maynard, D. R. 2524
Mazur, J. 2471
Mazzetti, J. P. 1320
Mazziotta, J. C. 1363
Means, J. L. 3047
Medeiros, M. F. 820
Meehan, J. R. 858
Meek, B. 1952
Meek, D. S. 2568
Mehl, J. W. 142
Mehlhorn, K. 2052 3230
Mehta, M. A. 3310
Mehta, P. C. 2457
Meijerink, J. A. 1164
Meinguet, J. 885
Meisen, A. 509
Mejia, R. 532 798
Meldman, M. J. 1929
Melton, R. A. 958 959 960 961 962
Melton, R. E. 1381
Meltzer, H. S. 390
Mente, L. J. 490 491
Merriam, C. 1263
Merten, A. G. 3262
Merzenich, W. 2845
Meseguer, J. 2851
Messer, C. J. 2496
Metze, G. 3286
Meulen, S. G. van der 1951
Meunier, J. G. 2793
Meurs, J. van 1237
Meyer, C. D. 2903
Meyer, C. R. 3413
Meyer, G. R. 291
Meyer, H. D. 810
Meyer, J. F. 18
Meyer, R. R. 345
Mezencev, R. 2731
Michaels, L. H. 3071
Michal, K. 3248
Michalski, R. S. 1985
Michel, G. 1867
Michels, D. L. 1972
Michie, D. 1982 1998 2254
Mickle, M. H. 3058
Middleton, A. G. 2623
Miel, G. 1152
Mierlea, V. 2717
Mihailovic, M. V. 264
Mihelcic, M. 2313
Mihram, G. A. 670
Mika, K. 1205
Miklosko, F. 3240
Milgram, D. L. 1146
Milgram, M. 863
Milinazzo, F. 1658
Miller, A. J. 2173 3250
Miller, G. L. 316
Miller, I. 3048
Miller, L. A. 2740
Miller, L. H. 2158
Miller, M. L. 2111 2112 2124 2125
Miller, R. E. 848
Miller, S. W. 474
Mills, D. L. 1278
Mills, H. D. 433
Millstein, R. E. 2106
Milman, Y. 1753
Milton, J. S. 292
Mina, K. V. 3224
Mirin, A. A. 807
Mishelevich, D. J. 1362
Misra, J. 1508
Mitchell, E. E. L. 2713
Mitchell, J. N. 535
Mitchell, O. R. 1710
Mitchell, R. A. 224
Mitchell, R. M. 1367
Mitchell, S. G. 1411
Mittal, M. C. 1150
Mittelmann, H. D. 884 1657 2918
Mix, M. 2710
Miyakawa, M. 2063
Miyazaki, S. 2224
Mize, S. G. 1362
Mizoguchi, R. 35
Modestino, J. W. 40 587 2890
Modina, L. S. 3176
Moenck, R. T. 1187
Mohan, P. 3086
Mohaptra, P. K. J. 113
Mohd-Jarjis, J. 3068
Mohilner, P. R. 2399
Mohn, R. K. 531
Moiseeva, N. I. 1357
Mok, A. K. L. 772
Molenaar, P. 1794
Moller, D. A. 286
Molloy, A. M. 2231
Molye, L. A. 130
Molzberger, P. 138 1580
Monahan, J. F. 2940
Monahan, M. A. 1005
Monegato, G. 68 1485 2037
Monien, B. 3140
Monroe, J. 2750 2751
Monsen, T. S. 936
Montanelli, R. G. 3365
Montangero, C. 3278
Montgomery, D. C. 118
Moore, J. 1438
Moore, J. S. 2104 2109 3192 3234
Moore, R. E. 2927
Mor, M. 27
Moradi, J. 2608
Moraga, C. 326
Moran, S. 3160
Moran, T. L. 3120
Moranda, P. B. 1864
Morasso, P. 3083
Morawski, P. 2658
Moreton, R. 2460
Morfitt, D. G. 1334
Morgan, H. L. 1324 1782 2128 2358
Morin, F. 1078
Moritz, S. H. 1401
Morphy, N. J. 3068
Morris, A. H. 742
Morris, C. W. 3092
Morris, J. 516
Morris, J. H. 1423 2057 2628
Morris, R. 1797
Morrisey, M. W. 397
Morrison, F. 2778
Morrison, R. 2635
Morrison, R. L. 2415
Morse, M. J. 1886 3037
Mosevich, J. W. 1163
Moss, G. S. 2764
Mossige, S. 891
Mostowski, A. W. 2849
Mostyn, J. A. N. 939
Motley, R. M. 2938
Motley, R. W. 3301
Mouftah, H. T. 1600
Mresse, M. 2804
Muchnick, S. S. 1551
Muchsel, R. 3269
Muckstadt, J. A. 3066 3246
Mudd, T. J. 784
Mudge, T. 3286
Mudholkar, G. S. 3260
Mueller, R. A. 1516
Mühlenfeld, E. 728
Mukherjee, A. K. 596
Muldner, T. 2972
Mulkowsky, G. P. 510
Mulla, J. D. 744
Muller, D. E. 1978
Muller, M. E. 893
Muller, R. G. 3338
Muller, U. 828
Muller-Reissmann, K. F. 3099
Mumpower, J. L. 1893
Mund, E. H. 352
Munro, J. I. 2626 2852
Munson, W. B. 768
Murakami, Y. 1043
Murdock, J. W. 3369
Murray, R. G. 2165
Murtagh, B. A. 674
Murthy, D. N. P. 200
Murthy, I. S. N. 2061
Musick, S. H. 1892
Musser, D. R. 439 1565
Myers, C. R. 1710
Myers, G. J. 293 411
Mynear, D. K. 1394
Myoken, H. 620
Myrick, R. J. 3084

Naeve, P. 834
Nagel, R. N. 2555
Nagl, M. 2860
Nagy, G. 759
Nahapetian, A. 1207
Nahi, N. E. 3197
Nahouraii, E. 376

, H. M. ... 3381
, Y. ... 856
h, P. ... 2216
jima, S. ... 2762
shima, K. ... 85
ba, D. ... 1195
e, R. E. ... 1217
simhan, M. A. ... 3199
one, J. ... 789
ndra, K. S. ... 2535
elsky, L. ... 1677
rajan, S. ... 2105
rer, F. ... 2330 3212
D. S. ... 2218
alanic, L. A. ... 2189
or, T. H. ... 1321
. A. S. ... 3031
, C. B. ... 2472
y, D. R. ... 1293
es, R. ... 3390
., R. ... 765
ey, P. M. ... 1803 2633
i, P. ... 1985 1988
mer, J. ... 922 1835 2091
, D. W. ... 2492
on, D. ... 736
on, G. A. ... 2527 2528
on, H. D. ... 3402
on, P. ... 1655
on, S. L. ... 186
tril, J. ... 2823
. J. W. Van ... 2283
el, R. J. ... 591
lage, R. L. ... 185
avali, A. N. ... 331 1901
berg, E. P. ... 3087
ffer, J. A. ... 1947 1948
hauser, C. ... 162
hold, E. J. ... 564 909 2649
mann, M. ... 597
wirth, E. ... 594
wirth, W. ... 2182
alainen, O. ... 2590
anlinna, O. ... 1734
atia, R. ... 34
come, D. L. ... 194
ell, A. ... 1438
man, I. A. ... 1558
man, M. ... 45
man, T. G. ... 1446
man, W. M. ... 479
F. K. ... 2655
lett, B. ... 839 1403
kel, K. ... 888
ol, D. A. C. ... 776
dereichholz, J. ... 174
derjohn, R. J. ... 3041
sen, G. I. T. ... 1008
sen, J. N. ... 1015
sen, N. R. ... 1056 1107
thammer, W. ... 615
tsch, H. ... 3338
vergelt, J. ... 3365
olt, A. ... 2534 3168
olai, P. J. ... 2616
s, F. E. ... 501
en, J. D. ... 805
son, H. G. ... 1922
son, N. J. ... 1129
ke, W. H. ... 1599
enberg, L. M. ... 676
nihara, H. K. ... 859
on, F. E. ... 747
zan, D. ... 506 1445
at, M. ... 2847
e, P. S. ... 573 3186
err, P. L. ... 515
guchi, S. ... 2530
an, R. L. ... 1108 2260
on, T. V. ... 1820
rdmann, B. J. ... 1579
rman, T. A. ... 2086
rris, E. M. ... 2842
rsett, S. P. ... 365 2561
rthwood, T. ... 153 1245
zaki, A. ... 1964

Nudds, D. ... 927
Nunamaker, J. F. ... 493
Nurdin, G. ... 812
Nussbaumer, H. J. ... 91 2594
Nutt, G. J. ... 1232 1279 2669
Nuttall, A. H. ... 917 1530
Nuttall, R. L. ... 1900
Nuyts, W. ... 3020

Oberle, H. J. ... 1497
Oberman, R. M. M. ... 169
O'Brien, F. L. ... 1636
O'Brien, J. V. ... 2963
O'Brien, M. ... 1358
Obtulowicz, A. ... 2835
Ochi, M. K. ... 396
O'Connell, T. R. ... 3343
Odeh, F. ... 373 374
O'Donnell, K. ... 782
O'Donnell, T. G. ... 2438 3025
Oehrli, R. R. ... 753
Oey, K. K. ... 3398
O'Hara, B. ... 819
Ohkita, M. ... 2711
Ojala, T. ... 1156
Oka, M. ... 1134
Okamoto, M. ... 46
Okamoto, T. ... 2721
Okrent, D. ... 1949
Oku, H. ... 1195
Oldehoeft, R. R. ... 2280 2394
Oldham, W. G. ... 3328
Oliger, J. ... 63
Oliver, N. N. ... 1202
Oliver, P. ... 2980 2994 2995 3001 3005
Ollongren, A. ... 2969
Olsen, C. F. ... 648
Olson, A. M. ... 1490
Omahen, K. J. ... 3220
O'Malley, R. E. ... 1167
Omolayole, J. ... 1455
Ong, C. M. ... 3069
Opp, M. ... 3165
Oppelland, H. J. ... 1848
Orbits, D. A. ... 1214
Orcutt, B. C. ... 1330
Ordover, J. A. ... 3131
Oren, T. I. ... 565 943
Ormicki, A. ... 2642
Ornstein, S. M. ... 1276
Orringer, O. ... 1014
Orser, D. J. ... 1840
Osborne, M. R. ... 2309 2310
Osborne, O. D. ... 1672
Oshika, B. T. ... 2886
Oshizaka, A. ... 1030
Osman, I. M. ... 141
Osorio, A. ... 265
Osterby, O. ... 387
Osterle, H. ... 2099
Ostermann, A. ... 1472
Osterweil, L. J. ... 684 1242
Osteryoung, R. A. ... 1332
O'Toole, J. W. ... 752 2467
Ottmann, T. ... 3153
Otto, R. W. ... 1266
Ouano, A. C. ... 1897
Overweel, F. J. A. ... 667
Owens, M .E. B. ... 256
Ozaki, I. ... 1021
Ozkarahan, E. A. ... 1283 2670

Paceley, L. R. ... 916
Pacini, G. ... 3278
Padilla, R. ... 512
Page, C. V. ... 865
Page, E. W. ... 3188
Page, K. ... 609
Page, P. D. ... 2707
Paige, C. C. ... 1473
Paige, G. C. ... 225
Pajunen, S. ... 1724
Paker, Y. ... 2129
Pal, S. K. ... 2550
Palit, A. ... 574
Pallaschke, D. ... 1475
Palme, J. ... 151 3258
Palmer, M. D. ... 2464
Panchamukhi, V. R. ... 1035
Panda, D. P. ... 3202
Pao, Y. C. ... 2219
Paolicelli, J. ... 2113
Papadimitriou, C. H. ... 1498
Papaioannou, S. G. ... 2543
Papaioannou, T. ... 657
Papakonstantinou, G. ... 1976
Papert, S. ... 1339
Pappas, M. ... 2080 2608
Paquette, L. ... 338
Pardo, L. T. ... 954 2070
Parhami, B. ... 1193
Park, J. M. ... 1065
Parke, R. H. ... 304
Parker, D. B. ... 1100
Parker, V. B. ... 1331
Parkin, A. ... 1679 1887
Parks, T. W. ... 2953
Parlett, B. N. ... 383 2334 2579
Parnas, D. L. ... 415
Parrish, D. L. ... 1003 3364
Parrish, E. A. ... 33 3038
Parsons, I. T. ... 2644
Partridge, D. ... 682
Pasemann, K. ... 733
Passow, E. ... 2935
Patel, A. M. ... 2682
Patel, J. H. ... 2420
Patrick, G. E. ... 3257
Patrick, M. ... 349 877
Patterson, C. L. ... 2160 2162
Patterson, M. S. ... 1975
Patterson, R. E. ... 3102
Patterson, T. N. L. ... 355 627
Pau, K. C. ... 38 1139
Paukert, F. ... 1040
Paul, G. ... 1799
Paul, W. J. ... 1424 2876 3177
Paulik, A. ... 1468
Paulsen, A. W. ... 2767
Paulus, E. ... 640
Pavey, C. F. ... 2165
Pavlidis, T. ... 582 1441 1714 2287 3198
Pavlossoglou, J. ... 212
Payne, H. J. ... 1377 1378 1379
Paz, A. ... 3160
Pazy, A. ... 2572
Peake, R. C. ... 953
Peano, A. G. ... 2480
Pearl, J. ... 1706
Pearson, J. G. ... 3118
Pease, M. C. ... 2130
Pedersen, J. ... 2942
Peebles, P. Z. ... 1097
Penick, J. J. ... 256
Peran, F. de A. R. ... 913
Pereyra, V. ... 1161 1491
Perini, J. ... 2190 2727
Perlee, H. E. ... 3094
Perlis, A. J. ... 1698
Perlman, A. B. ... 1083 1084
Peroin, G. H. ... 1896
Perrault, C. R. ... 313
Perrot, J. F. ... 2870
Perrott, R. H. ... 2641
Perry, G. H. ... 3291
Perry, I. R. ... 2588
Perry, P. F. ... 2478
Persoon, E. ... 1133
Pescaru, V. ... 2593 2717
Pesch, H. J. ... 1497
Pessel, D. ... 1263
Peters, C. C. ... 773
Peters, R. J. ... 3418
Peterson, D. R. ... 2268
Peterson, J. L. ... 2086
Petit, J. -P. ... 547
Petri, P. A. ... 1033
Petty, J. S. ... 2961
Pew, R. ... 511
Pexton, R. L. ... 2920
Pfeifer, L. L. ... 2888
Pflug, G. ... 665
Phelan, J. M. ... 1529
Phelps, C. E. ... 2369
Philips, P. R. ... 803
Phillips, G. T. ... 553
Phillips, J. B. ... 2127
Phillips, J. C. ... 2459
Philokyprou, G. ... 1420
Phau, K. H. ... 1741
Piacsek, S. A. ... 1062
Pian, T. H. H. ... 1014
Pieper, F. ... 701
Pierce, C. J. ... 3371
Pierce, R. F. ... 1220
Pierce, R. H. ... 1847
Piessens, R. ... 82 2022
Pietrzykavski, T. ... 1484
Pieva, R. M. ... 484
Pike, M. C. ... 1786
Pimmel, R. L. ... 1923
Pina, H. L. G. ... 2033
Pinder, K. L. ... 509
Piney, C. ... 1059
Pinkert, J. R. ... 1208 1767
Pinkus, A. ... 1463
Pippenger, N. ... 2043
Plaisted, D. A. ... 1694
Platou, A. S. ... 1008
Plemmons, R. J. ... 2903
Plesken, W. ... 2315 2316
Pletcher, R. H. ... 3403
Plocher, T. A. ... 2740
Plum, T. ... 1829
Plumb, O. A. ... 3400
Plummer, L. N. ... 1634
Plunkett, J. R. ... 1064
Pnueli, A. ... 3169
Pohl, H. ... 1405
Pohl, I. ... 1991
Pohst, M. ... 2315 2316 2907
Poitras, J. W. ... 1924
Polcyn, K. A. ... 3061
Polenske, K. R. ... 1034 1096
Polk, J. F. ... 271
Polley, V. I. ... 1111
Pollitt, W. H. ... 2976
Pomeranz, J. ... 1795
Pomerleau, A. ... 965
Pontius, H. E. ... 536
Pooch, U. W. ... 3186
Poole, W. G. ... 395 1749 1761 2965
Poorter, T. ... 3325
Popa, J. H. ... 404
Popescu, D. C. ... 2582
Popescu, I. ... 2181
Popick, P. R. ... 3281
Popper, G. ... 3077
Porjesz, T. ... 3397
Pos, N. ... 1808
Possin, G. E. ... 2437
Post, T. M. ... 1911
Postel, J. ... 3
Potenza, J. ... 2729
Potmesil, M. ... 2079 2113
Pouzin, L. ... 1304
Powell, D. R. ... 2586
Power, L. F. ... 1538
Powers, T. E. ... 521
Powers, V. M. ... 1407
Prasada, B. ... 1901
Pratt, V. R. ... 2057 2403
Pratt, W. K. ... 1717 2548
Preiser, K. ... 823
Prenner, C. J. ... 1340
Prenter, P. M. ... 623
Prentiss, N. H. ... 3372
Preparata, F. P. ... 895 1978 2937 2949
Price, K. E. ... 2551
Price, P. L. ... 3421
Price, T. G. ... 96
Pricer, W. D. ... 467
Pridor, A. ... 2026
Pries, T. H. ... 3086

Pritchett, P. L. 1373
Priven, L. 1235
Proctor, A. H. 216
Pronk, C. N. A. 527
Proskurowski, W. 1161
Protasi, M. 3172
Prowznik, J. 1910
Przewlocki, K .S. 2611 2612
Przybylko, S. J. 514
Psaltis, D. 868
Pszolla, H. 1562
Puchrik, A. 2413
Pugh, C. G. 685
Puke, V. 2029
Pultr, A. 2823
Puri, Y. 3393
Purnell, G. A. 1366
Pyke, T. N. 4
Pyrce, S. R. 2756

Quenon, L. 59
Quirino, M. 2236
Quon, C. 548

Rabedeau, M. E. 3351
Rabideau, G. F. 214
Rabin, M. O. 2817
Rabiner, L. R. 2883
Rabinowitz, P. 2017
Racin, J. A. 2227
Radack, S. 1688
Radday, Y. T. 278
Radhakrishnan, N. 777 778 779
Radhakrishnan, T. 1223
Radue, J. E. 2354
Radziszowski, S. 2856
Raffel, J. I. 472
Ragazzini, J. F. 272
Raher, S. J. 1215
Raitzer, G. A. 1294
Raja, A. K. 2641
Rajlich, V. 3175
Ralston, A. 1404
Ram, G. 2771
Ramamoorthy, C. V. 409 418 489 1230
Ramey, M. 2500
Ramirez, R. 3341
Rampal, V. V. 2457
Ramsin, H. 1762
Randall, R. E. 1095
Ranfft, R. 3036
Ranzieri, A. J. 2227
Rao, A. G. 3235
Rao, K. R. 3199
Rao, N. D. 3067
Rappaz, J. 2235
Rardin, R. L. 118 2344
Rasek, E. 2157
Rashid, R. 427
Rastogi, P. N. 556 557 558
Ratiu-Suciu, C. 2719
Ratkovic, J. A. 2008
Ratliff, H. D. 126
Ratner, M. 677
Rausche, F. ..... 1904 to 1907
Rauscher, T. G. 1270
Raver, N. 3218
Raviert, P. A. 2323
Ray, L. D. 1057
Ray, N. J. 1003 3364
Raymond, J. 431
Rayward-Smith, V. J. 845
Read, J. 1358
Reaser, J. S. 203 204 205
Reboh, R. 1241
Rechenmann, F. 3099
Redding, J. L. 2722
Reddy, S. M. 1431 1433 3190
Reddy, V. U. 1287 1517
Reed, S. K. 2520
Reed, W. E. 2150
Reetz, D. 644
Rege, S. L. 1289
Reichel, H. 2839
Reichert, T. A. 1925
Reid, J. K. 354
Reid, R. O. 1653
Reif, J. 1663
Reifer, D. J. 1583
Reimbold, T. C. 1026
Reimer, M. 592
Reimherr, G. W. 473 1718 1719
Rein, H. M. 3036
Reinsch, C. H. 1748
Reinstedt, R. N. 2263
Reintjes, J. F. 3407
Reiser, M. 1776
Reisner, P. 142 2101
Reitan, E. H. 1314
Reiter, A. 129 155 919
Reiterman, J. 2844
Remenyi, G. 3397
Renner, R. L. 1674
Rennert, P. F. 683
Renshaw, K. S. 1626
Rensink, M. E. 807 1369
Rentrop, P. 1497
Ress, H. 668
Retter, C. T. 3012
Retz, D. L. 1244
Reynolds, C. 420
Reynolds, D. 786
Reynolds, D. A. 854
Reynolds, E. F. 2726
Reynolds, G. E. 2265
Reynolds, J. C. 2274
Rhodes, M. 1455
Rhodes, T. R. 121 1395 2362
Rhyne, V. T. 573 3186
Ribaric, M. 663
Ribeiro, J. 2372
Ricci, F. J. 747
Rice, J. R. 1521 1783
Rich, C. 1860
Richards, L. J. 190
Richards, M. 1403
Richardson, M. G. 1184
Richter, G. R. 3211
Richter, M. D. 3300
Riciniello, F. 1770
Rickard, B. 2433
Rickman, S. M. 26
Rideout, V. C. 2217
Rieger, C. 1124 1437 2281
Ries, D. R. 3231
Riesbeck, C. K. 857
Rietsch, E. 878
Ring, S. J. 3391
Ringle, J. C. 1672
Rink, R. E. 528
Ripley, G. D. 2391
Rippin, D. W. T. 3382
Riseman, E. M. 42
Ritchie, G. R. 1599
Ritchie, M. 736
Ritman, E. L. 2219
Ritt, D. M. 3041
Rivest, R. L. 319 2542
Robbins, D. H. 1945
Robert, F. 343
Roberts, A. P. 2171
Robin, N. A. 1869
Robinson, L. 1559 2409 2410
Robinson, P. 2638
Robinson, S. K. 1837 2379
Robinson, S. M. 74
Robson, J. M. 2085 2652
Rochez, J. 2667
Rodeh, M. 3251
Rodgers, T. J. 3344
Rodrigue, G. 1731
Roesch, R. W. 3285
Roessler, R. 1254
Roever, W. P. de 3142
Roglieri, J. L. 1924
Rohl, J. S. 1823
Rokne, J. 2019
Rolland, S. 2793
Roman, G. C. 1165
Romanoff, R. J. 1916
Rondon, E. E. C. 1884
Ronning, G. 757
Root, D. J. 1528 1567
Rootenberg, J. 1595
Rooy, D. L. Van 38 39 1137
Roriz, L. F. C. 2016 2185
Ros, H. H. 529
Rosen, A. L. 2764
Rosen, B. K. 3158 3266
Rosen, C. A. 506
Rosenbarker, I. E. 3384
Rosenberg, A. L. 1555 1696
Rosenberg, J. M. 1109
Rosenfeld, A. 333 861 1131 1146 1147 1149 1708 1713 2005 2892 3201
Rosenhand, L. 871
Rosenhead, J. 111
Rosenkrantz, D. J. 2271 2936
Rosenmann, E. 3409
Rosenschein, S. J. 2245
Rosenthal, A. 1519
Rosenthal, R. 10 1275
Rosin, R. F. 1830
Ross, D. T. 2 932 945 946
Ross, N. P. 1360
Rossler, B. 3338
Rossow, M. P. 2480
Rothschild, L. P. 1729
Roubine, O. 2409 2410 2656
Roulier, J. A. 2935
Rouse, W. B. 1337 1774
Routh, M. W. 1050
Roveri, A. 1770
Rovner, P. 427
Rowell, J. 1847
Roy, D. A. 23
Roytberg, M. 2829
Rozenberg, G. 3151
Rubin, A. I. 1308
Rubin, F. 95 1784
Rubin, N. 2001
Rubinstein, R. 1903
Rubinstein, Y. 2850
Ruder, B. 1107
Rudner, B. 2115
Rudwick, B. H. 3061
Rumbaugh, J. 1269
Rumpf, D. L. 2355
Ruschitzka, M. 2398
Rushby, N. J. 279
Russell, B. D. 2970
Russell, J. T. 803
Russell, R. A. 2943
Russell, R. D. 623 1465
Ruston, H. 2126 2411
Rutledge, J. D. 1693
Rutovitz, D. 1983
Rutter, P. E. 3289
Ruttimann, U. E. 3416
Ryan, T. A. 2333
Rybezynski, A. 1302
Ryckaert, J. P. 1371
Rzepka, W. E. 2606

Saal, H. J. 687
Sabin, M. A. 93 99
Sabine, T. R. 499
Sable, J. 533 2228
Sabo, D. W. 1479
Sacerdoti, E. D. 1241
Saffman, P. G. 1658
Sagalovich, Y. L. 1974
Sagalowicz, D. 1241
Sagamang, J. P. 898
Sagar, A. D. 38
Sager, N. 1361
Sahasrabudhe, S. C. 3214
Sahin, K. E. 3357
Sähn, J. 926
Sahni, S. 1496 2055
Saib, S. H. 1314
Sajaniemi, J. 3275
Sakaki, T. 85
Salama, C. A. T. 3331
Salasin, J. 1104
Saleh, J. 3375
Salem, S. L. 1949
Salomaa, A. 3435
Salton, G. 1350 2483
Salwicki, A. 2967
Salzer, H. E. 636 1170
Sambur, M. R. 2883
Sameh, A. H. 105 1197 3225
Samet, H. 3270
Samet, M. G. 1364 3089
Sammet, J. E. 428
Sammon, P. H. 1155
Samuel, J. 2716
Sanders, J. 516
Sanders, R. W. 2698
Sandewall, E. 2098
Sandini, G. 3083
Sant, O. J. Van 3026
Santos, H. J. S. A. 550
Santos, J. J. A. dos 2236
Sanyal, P. K. 871 1458 2295 2296 2297
Sapiecha, K. 1701
Sarfaty, G. 2225
Saridis, G. N. 2223
Sarlat, D. 2731
Sarwate, D. V. 2346 2937
Sassano, A. 512
Satterthwaite, E. H. 2628
Sattler, H. 507
Sauer, C. H. 2447
Saunders, M. A. 674 1473
Saville, P. 1887
Savitch, W. J. 3154
Savoie, R. E. 1292
Sawchuk, A. A. 585
Sawin, L. 229
Saxena, A. R. 3304
Saxton, T. L. 1303
Sayers, B. M. 2222
Sayers, D. K. 1765
Sayward, F. G. 2986
Scala, J. 1341
Scala, P. 1383
Schachter, B. J. 1149
Schaefer, D. H. 967
Schaenzer, J. P. 2989
Schafer, B. W. 1244
Schaffert, C. 2618
Schamel, H. 543
Schank, R. 1996
Schank, R. C. 857
Schantz, R. E. 2106
Schatz, A. H. 1162 1466 2314
Scheibe, P. O. 524
Scheifler, R. W. 2968
Schell, R. R. 1959
Schenk, K. 1254
Schere, K. L. 3053
Scherer, R. 2564
Scherzer, B. M. U. 269
Scheuermann, P. 2636
Schirarend, H. 2505
Schissler, L. R. 1288
Schkolnick, M. 2338
Schlechtendahl, E. G. 282
Schlesinger, M. E. 2489
Schlittgen, R. 609
Schmeisser, G. 886
Schmid, F. 606 760
Schmidt, B. 1554 2132
Schmidt, E. M. 2867
Schmidt, J. W. 3277
Schmidt, R. 2294
Schneeweiss, W. G. 2278
Schneider, B. R. 2507
Schneider, H. 529
Schneider, H. J. 2838
Schneider, K. 733
Schneider, P. 1284
Schneidewind, N. F. 2662
Schoellkopf, J. P. 1280
Schoenstadt, A. L. 1659
Schoman, K. E. 945
Schori, T. R. 406
Schramm, C. R. 1000

eder, E. A. 2800
eder, L. W. 766
ert, W. L. 746
hmann, H. R. 2096 2259
er, L. 602
z, A. 1938
z, G. W. 1086
z, M. 1619
z, S. 1029
, A. 145 947 2648
g, W. A. 1232 1544
nacker, B. 2405
naker, L. L. 122
nan, H. 2190
heim, B. 1868
ter, R. 1669
ter, S. A. 1283 2670
ab, B. 1764
artz, H. J. 3430
artz, R. M. 1330
artzberg, M. A. 3047
arz, C. R. 1316
arz, H. R. 1504
arz, J. 1691
arz, W. 507
ede, G. W. 2878
ee, L. J. 3026
efel, H. P. 2255
eitzer, P. J. 213
ember, H. 3049
C. G. 1894
D. S. 2841
M. R. 1500
R. 70
R. H. 2260
W. H. 1656
en, R. S. 2627
erg, E. C. 2774
n, C. T. 1883
D. C. 2234
vsky, H. 1286
ow, S. Y. 1354
wick, R. 2066
D. 2820
R. 1056
as, J. I. 846 849 2840
t, D. J. 206 492 538 2614
T. A. 2789
, H. W. 1916
. E. 782
, P. M. 2470
o, M. E. 380 3226
, K. D. 2709
n, R. H. 2722
, A. G. 1943
, M. 2741
ons, V. S. 1351
S. C. 577
R. 655 2340 2960 3267
er, R. V. 1432
dson, P. 1038
k, K. C. 2670
ance, D. G. 2365 3229
old, H. 593
el, R. 1497
nam, M. 92
, R. R. 745
et, E. 3122
nash, Y. 2208
uir, A. 508 3264
uir, E. 325
nos, M. I. 401
apine, L. F. 1745 1772 2071
kar, K. S. 437
no, D. F. 1741
ira, R. 1809
iro, B. 1619 1622 2455
3410
iro, L. G. 1442
iro, M. 1757
an, R. 2596
ma, A. 595
ntry, T. F. 1076
, M. 147 422 703 1849
1850 1851 2400 2619
er, I. 2515

Shebini, N. 3405
Shedler, G. S. 89 114 144
1541
Shedletsky, J. J. 1594
Shellman, C. H. 1334
Shelton, C. B. 1399
Shelton, J. H. 157
Shen, V. Y. 1522
Shenoi, B. A. 3392
Sheppard, L. C. 2222
Sheppard, S. B. 3367
Sherman, B. F. 1467
Sherman, S. W. 2632
Sherwood, J. D. 2650
Shewchuck, C. F. 3380
Shibui, M. 311
Shields, T. R. 1327
Shillman, R. J. 2006
Shimura, M. 35
Shinaishin, M. A. M. 542
Shirakawa, I. 2915
Shiroma, D. M. 3399
Shishido, S. 1030
Shlevin, H. H. 1291
Shneiderman, B. 694 2090
Shonyo, C. 498 795
Shooman, M. L. 2105 2126
2411
Shore, H. 278
Shore, J. E. 951
Shore, R. F. 735
Shostak, R. E. 3191
Shoucri, M. M. 1370
Shreve, E. L. 3043
Shrobe, H. E. 1860
Shu, N. C. 97 2631
Shubert, B. O. 125
Shutt, J. J. 1602
Shutt, M. D. 1913
Shyr, H. J. 2822
Sickel, S. 2000
Sidi, A. 2928
Siefkes, D. 2821
Siegel, H. J. 1258
Siewiorek, D. P. 1264 1587 2418
2419 2674
Sikdar, K. 850
Silberschatz, A. 2092
Simmons, J. W. 781
Simon, J. 3149
Simon, K. H. 3105
Simon, R. C. 1928
Simoni, L. 3424
Simonov, M. Y. 1357
Simoons, M. L. 3414
Simpson, J. C. 1742
Simpson, R. B. 544
Simpson, R. C. 1627
Sims, C. E. G. 189
Sincovec, R. F. 75 1486
Singer, C. 493
Singh, I. M. 3012
Singhania, A. K. 1542
Sinha, N. K. 2733
Sinniger, J. O. 3306
Sinnott, L. T. 3062
Sint, L. 1435 1707
Sintonen, L. 1430 2416
Sipala, P. 2956
Sippu, S. 3147
Siskind, V. 111
Siwiec, J. E. 2469
Skarabis, H. 829
Skeel, R. 339
Skelboe, S. 1725
Skelly, J. 871
Skelton, A. P. 3385
Skinner, D. E. 3055 3057
Skolka, J. V. 1040 1096
Skronn, H. -J. 1189
Skyum, S. 3144
Slagle, J. R. 1451 1523
Slavin, M. V. 935 2624
Slemons, S. V. 2761
Sloan, I. H. 64 357
Slowinski, R. 2931

Slutz, D. R. 89
Slutzki, G. 3169
Smet, J. de 2698
Smith, A. 897
Smith, A. J. 407 949 1201 3307
Smith, B. D. 1666
Smith, D. C. P. 2054 2589
Smith, D. E. 918
Smith, H. V. 348 1727
Smith, J. B. 1668
Smith, J. E. 855
Smith, J. M. 2054 2589
Smith, K. C. 1283
Smith, M. L. 875
Smith, M. W. A. 2171
Smith, P. 1858 1859
Smith, P. C. 2438 3025
Smith, P. W. 1171
Smith, R. J. 783
Smith, R. L. 3047
Smith, R. W. 1316
Smith, S. E. 103 1494
Smith, S. J. 657
Smith, S. L. 275 1085
Smith, T. C. 200
Smith, T. H. 1893
Smith, W. B. 3310
Smithin, F. J. 1247
Smoliar, S. W. 2245
Smulders, A. J. 2435
Smythe, W. F. 1179
Snell, N. S. 1675
Snyder, A. 2618
Snyder, L. . 848 2386 2992 3002
Snyder, W. E. 2896
So, Y. H. 1185
Sod, G. A. 1070
Soden, J. V. 1326
Soffer, S. B. 1609
Soisalon-Soininen, E. 3147
Sokolovsky, Z. 115
Soleglad, M. E. 950
Soloman, C. J. 1339
Solomon, H. 672
Solomon, J. M. 3046
Solovay, R. M. 317 1469
Sommer, D. V. 3362
Southall, R. 3259
Southwell, W. H. 2586
Souza, P. V. de 2766
Sowa, M. J. 3056
Spach, M. S. 242
Sparreboom, D. 527
Spath, H. 643 907 3245
Spaulding, A. D. 2193
Speckert, G. 1093
Spector, A. Z. 1340
Spector, B. I. 1067
Spector, M. 1352
Spellucci, P. 78 1483
Spielman, B. E. 504
Spielman, S. C. 3059
Spies, K. P. 3055
Spira, R. 79
Spirtas, R. 797
Spitler, R. W. 957
Spoomamore, J. H. 788
Spratt, E. B. 1403
Srihari, S. N. 334
Stadel, M. 2846
Stahl, F. A. 1180
Stahl, H. 609
Staiger, L. 2826 2859
Stalk, G. 1014
Stallings, W. 1132
Stamper, R. K. 1834
Stanek, E. K. 2494
Stanic, U. 244
Stankowski, B. J. 912
Stanton, E. L. 3406
Staples, B. R. 1900
Starius, G. 2021 2305
Stark, H. 245
Starks, S. A. 38 39 1137 1139
Starkweather, W. F. 562
Starmer, C. F. 523

Stastny, P. 1362
Staudenmaier, H. M. 3388
Stauss, F. F. 1927
Stearns, R. E. 2936
Stecher, P. 2718
Steeb, R. 1364
Steele, G. L. 707 952 1571
Steffen, D. A. 2206
Steiger, A. D. 2920
Steiger, W. L. 3211
Steiglitz, K. 1498
Steihaug, T. 2567
Stein, K. U. 3330
Steinbeck, W. 2794
Steinberg, D. I. 908
Steinberg H. A. 1092
Steinby, M. 3435
Steingart, A. 1773
Stephanou, H. E. 2223
Stephens, A. B. 52
Stephenson, J. L. 532 798
Stepleman, R. S. 346
Steppeler, J. 260
Stetkar, J. W. 1347
Stetter, F. 567 1562
Stewart, G. W. 109 634 1747
2038
Stewart, R. B. 2724
Stewart, R. G. 3340
Sties, M. 583
Stillman, N. J. 1760
Stindlova, J. 794
Stockman, G. 530
Stockmeyer, L. J. 1555
Stockmeyer, P. K. 1749 1761
Stoer, J. 3213
Stoffers, K. E. 3187
Stocia, M. 2719
Stokes, A. V. 1110
Stone, H. S. 933
Stone, J. L. 1309
Stonebraker, M. 3231
Stoneburner, P. 1817
Stonham, T. J. 1709
Storey, T. 2389
Storma, M. T. 160 215
Stout, H. S. 2791
Stoutemeyer, D. R. 2051 2336
Stram, B. N. 1023
Strand, O. N. 2361
Strassen, V. 1469
Strauss, B. H. 2779
Strawn, G. O. 1824
Strehmel, K. 66
Streinu, I. 3155
Streitberg, B. H. J. 603 639
Stricker, R. E. 3306
Strobel, M. G. 3107 3112
Stroke, G. W. 866
Strong, J. P. 967
Struessel, D. 2744 2745
Studer, R. 2649
Sturhahn, J. 2476
Stutz, J. 1818
Stygar, P. 2413
Su, S. Y. W. 408
Subramanian, R. 200
Sudborough, I. H. 3178
Suen, C. Y. 1296 2006
Sugimura, M. 800
Sugito, Y. 2063
Sugiyama, Y. 468
Sukert, A. N. 709
Sullivan, J. E. 957
Sullo, G. 273
Summers, P. D. 688
Summers, R. C. 1192
Sundaramurthy, M. 1517
Sundareshan, M. K. 1335
Sunshine, C. A. 1299
Supanekar, S. D. 825
Suparman, A. I. 80
Surh, D. S. 3097
Sussman, G. J. 707
Sussman, J. M. 2073
Sutcliffe, D. C. 108

Sutherland, I. E. 3134
Suto, Y. 3196
Sutton, J. A. 1406
Suzuki, N. 2406
Suzuki, T. 2285
Suzumura, N. 3415
Svobda, Z. 1804
Swail, J. C. 1296
Swami, S. 2457
Swamy, M. N. S. 1616
Swan, H. J. C. 520
Swan, R. S. 2418
Swanson, E. B. 1408 1410
Sweet, R. A. 2904
Swift, G. W. 3068
Swindell, W. 1087
Sycara-Cyranski, E. 3173
Symanski, J. J. 729
Symes, L. R. 2280 2394
Sysuev, V. M. 1357
Szabo, B. A. 2480
Szygenda, S. A. 324
Szymanski, T. G. 309 1122 1416 ..... 1768 2867

Tabakoff, W. 223
Tacey, R. K. 1909
Tafvelin, S. 393
Tagliasco, V. 3083
Taibl, P. E. 2232
Tajibnapis, W. D. 2341
Takahashi, M. 3163
Takanami, I. 311
Takiyama, R. 36
Talambiras, R. P. 478
Talavage, J. J. 17 2473 3097
Tallis, G. M. 2225
Talmi, A. 1072
Tamberrino, S. D. 130
Tanaka, K. 2538 3395
Taneda, A. 1195
Tanenhaus, M. E. 513
Tang, C. K. 1261
Tang, D. T. 2696
Tang, I. 2170
Tang, M. Y. 2733
Tanimoto, S. L. 1441
Tanjii, K. K. 397
Tannehill, J. C. 1372
Tapiero C. S. 272
Tarabji, S. D. 1944
Tarjan, R. E. .315 342 351 2947 3177
Tarnlund, S. A. 2536
Tassel, D. L. Van 563
Taulbee, O. E. 2175
Tavera, M. L. 2084
Taylor, F. E. 1012
Taylor, F. J. 910 3086
Taylor, G. R. 1010
Taylor, J. M. 2114
Taylor, M. L. 1947 1948
Taylor, P. J. 366
Taylor, R. 930
Taylor, R. W. 2100 2631
Teets, R. M. 2671
Teichroew, D. 940
Teixeira, J. de M. L. 1735
Templeton, M. P. ..... 2117 2118 ..... 2120 2122
Tenney, D. 2955
Terplan, K. 1825 2516
Terzian, C. M. 783
Tesfamariam, H. 2772
Teskey, N. 1833
Tewarson, R. P. 532
Thatcher, J. W. 572
Thathachar, M. A. L. 29
Thayer, T. A. 710
Theede, C. 192
Thesen, A. 2629
Thibodeau, K. 2504
Thiele, V. 21
Thierrin, G. 2822
Thomas, D. G. 2769
Thomas, G. 741
Thomas, G. N. 2948
Thomas, J. M. 2323
Thomas, R. H. 127 2664
Thomas, R. J. 3398
Thomas, S. E. 2796
Thomassen, H. J. 1822
Thomee, V. 1466 2910
Thompson, B. J. 1009
Thompson, C. D. 1520
Thompson, C. J. 1930
Thompson, E. W. 324
Thompson, J. F. 1177
Thompson, M. R. 1944
Thompson, P. M. 3331
Thompson, R. G. 2189
Thompson, W. B. 1448
Thomson, B. M. 450 562 830
Thomson, R. G. 458
Thon, F. 866
Thorelli, L. -E. 417
Thorne, J. S. 3076
Thoss, R. 1024
Thrussell, C. 1954
Thurmond, P. 2739
Tilemann, T. 3373
Tindall, N. H. 199
Tinhofer, G. 2577
Tinker, R. W. 1855
Tiuryn, J. 2833
Tjoa, A. M. 683
Tjok-Joe, M. 661
Tjosheim, D. 1447
Tobagi, F. A. 1301
Todd, S. 2389
Todd, S. J. P. 1785
Toida, S. 161
Tokoyama, K. 1043
Tokubo, S. 452
Tomek, I. 37
Tomita, F. 864
Tomlin, J. A. 679 1219
Tompa, F. W. 377
Tompkins, G. E. 1408 1410
Tong, D. M. 2831
Tonge. J. D. 3308
Ton-That, L. 769
Torelli, M. 3170
Torn, A. A. 2583
Torng, H. C. 2145
Törnig, W. 2031
Torre, E. D. 1740
Torrie, G. M. 1073
Torsun, I. S. 1837 2379
Tosser, A. 853
Toussaint, G. T. 1450
Towe, A. L. 241
Townsend, H. R. A. 1844
Towsley, D. F. 1515
Toyoda, J. 2538
Tracy D. S. 666
Traiger, I. L. 102
Trainor, W. L. 2468
Tran-Thong 2059
Traub, J. F. 590 1153
Travis, L. 379
Treaster, A. L. 2752
Treu, S. 163
Triance, J. M. 143
Tricoles, G. 1090
Triebwasser, J. H. 1061
Tries, B. 1695
Trigiante, D. 1462
Tripathy, S. C. 3067
Trnkoczy, A. 244
Trnkova, V. 2858 2861
Trojanowski, A. E. 2947
Trotter, J. D. 3344
Truesdell, A. H. 1634
Truquet, M. 1384
Trussell, H. J. 2884
Tsai, M. J. 1923
Tsai, M. K. 3392
Tsay, J. C. 1946
Tsichritzis, D. 391
Tsokos, C P. 292
Tsui, F. 1235
Tsuji, S. 864
Tsuji, T. 2538
Tsujiyama, B. 3024
Tsukiyama, S. 2915
Tsuikui, J. 1043
Tu, T. O. 1897
Tucker, R. I. 480
Tucker, W. B. 3119
Tuel, W. G. 131
Turek, M. 2413
Turini, F. 3278
Turkel, E. 54 2901
Turn, R. 299 1099 2263 2267
Turner, J. A. 1332
Turner, J. M. 2496
Turnquist, M. A. 2073
Turoff, M. 1352
Tuyl, R. L. Van 3327
Twigg, D. W. 2050 3259 3431
Tyson, M. 1999
Tzimbalario, J. 595

Udupa, K. J. 2061
Ueberhuber, C. W. 2562
Uhrin, J. J. 276
Ulam, S. M. 2865
Ule, L. A. 285
Ulfers, H. 453
Ullman, J. D. ..... 314 681 1122 ..... 1416 2349
Ullman, S. 1439
Ullmann, J. R. 1135 1755
Underhill, W. G. 1114
Underwood, J. A. 1908
Ungaro, L. 1867
Unger, B. W. 1578
Unger, S. H. 578 1434 1704
Unnam, J. 502
Unterauer, K. 2352
Urban, R. J. 959 2988
Uselton, S. P. 3247
Usmani, R. A. 2566

Vachon, B. 863
Vaduva, I. 2587
Vairavan, K. 16 3173
Valiant, L. 1424
Valiant, L. G. 312
Valleau, J. P. 1073
Vallet, D. 1027
Vandenbrug, G. J. 861 1121 1713
Vanderheiden, G. C. 1294
Vanwynsberghe, D. 1036
Varah, J. M. 1154
Varol, Y. L. 1 1667 1771
Vastano, A. C. 1653
Vatcu, M. 2720
Vaughan, R. H. 1003 2665
Veelenturf, L. P. J. 2533
Veillon, F. 2067
Veinott, C. G. 3073 3074
Venegas, E. C. 2186
Venkatacharya, K. 802
Verdooren, L. R. 650
Verhofstadt, P. W. J. 3328
Vermeir, D. 3151
Verwer, J. G. 612 1487
Veselic, K. 368
Veselka, R. 785
Vesterinen, M. 2590
Veuillot, J. P. 3401
Vichnevetsky, R. 486 2563
Vick, C. R. 942
Vickers, M. V. 2659
Vietorisz, T. 1045
Vineberg, M. 320 321
Vinek, G. 683
Vines, L. P. 219
Vitanyi, P. M. B. 3154
Vlaeminck, R. 3020
Vöge, E. 733
Vogel, M. A. 586
Vogt, W. G. 762 3058
Voigt, R. G. 395
Voith, R. P. 1980
Volkonskii, V. 1041
Voorhis, D. C. Van 2585
Vorst, H. A. van der 1164

Wacker, H. 2034
Wade, B. W. 142
Wadge, W. W. ..1550 2388 3264
Wagenführer, E. 370
Wagman, D. D. 1331
Wagner, B. N. 1221
Wagner E. G. 572
Wagner, H. -J. 873 3223
Wagner, K. 2859
Wagner, R. R. 683
Wahba, G. 2919
Wahlbin, L. B. 1466 2314
Wahlstrom, B. 1624
Waite, W. M. 896 1403
Wal, J. van der 101
Walch, G. 381
Walczak, K. 2877
Waldinger, R. J. ..852 1241 1981
Waldschmidt, H. 3252
Walke, B. 3272
Walker, A. 98
Walker, A. J. 2944
Walker, B. J. 2512
Walkowicz, J .L. 1961
Wallace, M. A. 121 1852 2362
Wallach, Y. 1470 1842
Wallingford, E. E. 3103
Wallis, A. 2444
Walsh, J. L. 467
Walston, C. E. 2094
Walter, H. K. G. 3171
Waltman, F. M. 2785
Walton, D. J. 2568
Waltz, D. L. 232
Wamsley, R. M. 780
Wang, H. T. 2238 3117
Wang, L. 1502
Wang, S. T. 258
Wanstrath, J. J. 1653 1654
Ward, E. D. 2195
Ward, J. D. 1171
Ward, R. C. 2952
Wardlaw, A. B. 3046
Ware, W. H. 299 2267 3378
Warfield, J. N. 2342
Warme, P. K. 1899 1919
Warnecke, H. J. 763
Warner, R. B. J. 1877 2431
Warren, H. M. 3013
Warren, H. S. 2093
Warren, R. B. 242
Warsi, Z. U. A. 1177
Warth, W. 3232
Wartuft, D. L. 254 756
Wasmundt, K. C. 2206
Wasson, J. S. 1664
Watanabe, T. 2530
Waterman, D. A. 3181
Waters, R. C. 963
Waters, S. J. 923 2595
Watkins, D. S. 2908
Watkins, S. W. 712 2445
Watson, D. C. 436
Watson, D. M. 860
Watson, G. A. 384 2074
Watson, R. W. 1297
Watts, H. A. 1500 1745 1772
Watts, R. M. 2507
Waumans, B. L. A. 711
Waxman, J. 1595
Weaver, C. 2203
Weber, G. 689
Weber, R. P. 590
Wechler, W. 2830
Wechsler, H. 2802
Wedepohl, L. M. 3068
Wedin, P. A. 1762
Wedlake, J. 1302
Wee, W. G. 525
Wegbreit, B. 1423 2088 2270
Weglarz, J. 2931
Wegner, P. 426

T. P. van der 2969
uch, K. 2836
d, R. J. 1327
F. C. 755 1058
erg, J. M. 995
erger, P. J. 1729
ir, H. 926
ld, R. 2954
aub, S. 2571
od, R. L. 1705
opf, C. 153
R. 128 347 2899
coff, R. 1025
nan, S. J. 1810
muller, J. J. 1812
, P. D. 1404
, U. v 632
n, J. L. 1391
ian, G. 3122
cke, S. J. 1942
r, J. 3232
y, M. A. 2743
l, K. -J. 211
ly, H. W. 2009
er, B. 1302
er, E. J. 1338
R. E. 2808
rook, D. E. 1094
rmark, S. L. 950
n, A. F. 1681
ake, A. J. 700
nann, R. A. 776
on, M. K. 2048 2053
tein, H. 416 1236
blat, R. L. 136
der, J. K. 2192
eler, M. F. ... 367 601 1464
ston, A. B. 2622 2962
..... 2964 3051 3081
aker, R. E. 1653
, B. E. 621
, C. C. 526
, D. D. 216
, G. M. 1793
, J. A. 2436
, J. E. 1234
, J. R. 1846
, M. C. 515
, N. M. 3117
, S. P. 549
ehead, D. G. 196
lesey, N. K. 1895
owski, C. A. 767 2415
g, T. 642
mann, B. A. 1403 2380
mann, D. 280
, D. A. 1080
nd, O. 874 1161

Wield, G. L. 1649
Wiesner, B. 2755
Wiggert, D. C. 3427
Wilber, B. M. 1241
Wilcox, T. R. 199 3365 3366
Wile, D. 3290
Wilf, H. S. 1404
Wilhelm, N. C. 726 1263 2145
Wilhelmson, R. 1941
Wilke, N. W. 781
Wilkes, M. V. 435
Wilkie, A. D. 2601
Wilkinson, A. B. 2456
Will, P. M. 90
Willasch, D. H. 866
Willensky, H. 1584
Willers, I. M. 116
Willers, R. 645
Willet, T. 1716
Williams, A. S. 156
Williams, H. C. 87 112 2303
..... 2922 2939
Williams, K. S. 60
Williams, M. H. 931 2621
Williams, P. W. 2753
Williams, R. 1106
Williams, R. P. 1598
Williams, T. J. 2196
Williams, W. T. 1404
Williamson, K. H. 1232
Williamson, S. G. 388
Willie, R. R. 1813
Willman, H. E. 3138
Willmorth, N. E. 2116 2117
..... 2118 2121 2123 3291
Willson, D. M. 2989
Wilson, D. G. 1751
Wilson, G. A. 2359
Wilson, G. S. 2127
Wilson, J. D. 3103
Wilson, M. W. 1799
Wilton-Davies, C. C. 132
Wimp, J. 1480
Windeknecht, T. G. 1174
Wineholt, E. M. 1814
Wing, H. J. 522
Winkle, W. A. Von 840
Winkler, C. B. 1911
Winkler, J. F. H. 429
Winkler, R. H. 3004
Winkler, S. 1117
Winkowski, J. 2811
Wirth, N. .. 1226 1239 1246 2647
Wise, D. S. 436
Wise, R. B. 1393
Wisehart, W. R. 3292
Wiseman, N. E. 2638
Witsch, K. 881

Witt, J. 1547
Witte, J. 727
Witten, I. H. 579
Wiweger, A. 2837
Wojnarowski, M. E. 1348
Wolf, G. 614
Wolf, H. K. 2650
Wolfbrandt, A. 2561
Wolfe, J. W. 2487
Wolfe, P. D. 481
Wolff, H. 602
Wolter, E. 3338
Womble, M. E. 1061
Wong, A. 2483
Wong, A. K. C. 581 586
Wong, C. K. 173 1756
Wong, E. 2186
Wong, K. C. 3237
Wong, Y. Y. 3259
Wood, B. 360
Wood, D. 98 851
Wood, E. H. 160 215
Wood, H. M. 712 1536 2521
Wood, J. F. 3133
Wood, M. P. 1019
Woodbury, M. A. 2218
Woods, W. A. 336
Woolf, S. 2963
Wooley, R. M. 224
Wormald, E. G. 1597
Worsdale, G. J. 608
Wortman, D. B. 206 492 538
..... 1888 2461 2614
Wotschke, D. 1689
Wouk, A. 2777
Wozniakowski, H. 1482 2320
..... 2578
Wright, J. B. 572 1891
Wright, R. D. 820
Wu, S. C. 3236
Wu, S. M. 1692
Wulf, W. A. 147 422 703
..... 1850 1851 2400 2619
Wunderlich, E. F. 969
Wurges, H. 415
Wyatt, J. B. 1111
Wyatt, W. T. 1840
Wybraniec, R. J. 449
Wybraniec, S. 2800
Wyvill, B. L. M. 1839

Yakowitz, S. J. 2252
Yam, S. E. 330
Yamamoto, W. S. 3416
Yang, E. S. 215
Yang, K. T. 3123
Yao, A. C. 319
Yao, S. B. 1495 2337 2350

Yao, T. H. 2914
Yap, C. K. 3145
Yasaitis, J. A. 472
Yassace, H. 626
Yashuhara, M. 1134
Yau, S. S. 159 584
Yeh, C. 2495 3383
Yeh, R. T. 420
Yelowitz, L. 412
Yohe, J. M. 2615
Yonemoto, J. 1926 2216
Yonezawa, A. 2412
Yorke, J. 49
Yoshimoto, F. 2343
Young, B. 2748 2749
Young, I. T. 2046
Young, J. M. 2361
Young, M. E. 519 3082 3389
Young, P. 3271
Youssef, H. 2709
Yu, C. T. 1350 3217
Yu, J. M. 1925
Yu, K. K. 3028
Yu, P. S. 3358
Yuba, T. 2063
Yue, P. C. 173
Yuen, C. K. 1181 1509
..... 1802 1973
Yuschik, M. 3352
Yuval, G. 1225 1832 2651

Zabinski, M. P. 1676
Zaccaria, R. 3083
Zadunaisky, P. E. 350
Zahar, R. V. M. 1477
Zajicek, G. 3409
Zalcstein, Y. 1413 1417 2275
Zakrajsek, E. 890
Zamperoni, P. 2003
Zarri, G. P. 791
Zassenhaus, H. 2907
Zave, D. A. 1512
Zeh, J. 2617
Zeldin, S. 1570
Zemanek, H. 1101 2502
Zettersten, A. 2758
Zielstorff, R. D. 1924
Zimmerman, C. 3387
Zimmerman, T. A. 3323
Zimmermann, H. 656
Zisapel, Y. 24
Zloof, M. M. 1200 2187
Zobrist, A. L. 647
Zorzi, E. S. 3402
Zowader, R. 2372
Zucker, S. W. 1708 2005
Zweben, S. H. 1971

PATENT INDEX

Addressograph-Multigraph Corp. 187
Amdahl Corp. 166 465 2141

Bassani Ticino S.p.A. 725
Bell Telephone Labs., Inc. 172 1608 1614
Boeing Co. 2712
British Food Mfg. Industries Res. Assn. 2485
Bunker-Ramo Corp. 167
Burroughs Corp. . 975 2014 2685 3348 3354

Centro Studi e Laboratori Telecomunicazioni S.p.A. 3359
Compagnie Honeywell Bull 462 464
Compagnie Industrielle des Telecommunications Cit-Alcatel 1615 2450
Compagnie Internationale pour l'Informatique CII-Honeywell Bull ..... 973 ..... 2446 3015 3016 3017 3018 3315 3320
Crudeli, L. 191

Data-Loop Ltd. 3312 3313
Digital Computer Controls Inc. 1593
Digital Equipment Corp. 168 719 2429
Directeur-Generaal der Posterijen, Telegrafie en Telefonie 2298

Electronic Memories & Magnetics Corp. 987

Fletcher, J. C. 3321
Foxboro-Yoxall Ltd. 2172
Fritz Schwarzer GmbH 1652
Fuji Electrochemical Co. Ltd. 1606
Fujitsu Ltd. 972

Gen. Electric Co. 993 2453
Gilley, G. C. 3321
Goodyear Aerospace Corp. 2142
GTE Automatic Electric Labs., Inc. . 165 977
GTE Labs., Inc. 2689
Gvinepadze, A. D. 986

Hasler AG 717 1591
Hawker Siddeley Dynamics Ltd. 716
Hitachi Ltd. 2428 2557
Honeywell Information Systems Inc. 182 485 ..... 721 722 1617 2148

Instituttet for Produktudvikling 872
Int. Business Machines Corp. ... 177 178 181 ..... 183 188 466 476 718 738 978 980 ..... 989 991 992 1590 1603 2147 2154 ..... 2443 2678 2691 2692 3349
Int. Computers Ltd. 715 998 2426 2432 3022
Intel Corp. 2156 2440 2441 2687
Iwatsu Electric Co., Ltd. 477

Kabushiki Kaisha Ricoh 2012 3204
Kokusai Denshin Denwa Kabushiki Kaisha 2690
Koltsova, A. A. 986

Litton Systems Inc. 1607

Memorex Corp. 974 976
Morra, P. G. 191
Motorola Inc. 2684
Mullard Ltd. 2163 3034

Nat. Research Development Corp. ..... 475 ..... 3023 3205 3336 3346
Nestor Associates 3193
Nippon Electric Co., Ltd. 994 1605

Okuma Machinery Works Ltd. 2138
Olivetti & C. S.p.A. Ing. C. ..... 463 2140 ..... 2421 2424 2427 3314
Optical Business Machines 2558

Periphonics Corp. 988
Philips Electronic & Associated Industries Ltd. 470 713 724 985 3318 3345
Plessey Co., Ltd. 2153
Post Office 2167

Raytheon Co. 1592 2164
RCA Corp. 2705
Recognition Equipment Inc. 2556 2559
Ricoh Co., Ltd. 337

Semi Inc. 2155 2686
Sharp Kabushiki Kaisha 2299
Siemens AG ..... 461 732 739 983 2139 2146 ..... 2151 2152 2166 2422 2423 2439 2452 ..... 3014 3029 3030 3316 3317 3333 3360 3361
Smirnov, R. V. 986
Societa Italiana Telecomunicazioni Siemens S.p.A. 2168
Solartron Electronic Group Ltd. 1001
Sony Corp 1604
Sperry Rand Corp. 179 720 2694
Standard Telephones & Cables Ltd. 2451 3319

Takachiho Koeki Kabushiki Kaisha 2695
Takeda Riken Kogyo Kabushiki Kaisha. 731
Technology Marketing Inc. 3322
Telefonaktiebolaget L. M. Ericsson 2194
Texas Instruments Inc. 1589 2143 2442
Thomson-CSF 714 3033
Toko Kabushiki Kaisha 180
Tokyo Shibaura Electric Co., Ltd. .. 723 2680 ..... 2897 3334 3335 3337

University of Illinois Foundation 737
U.S. Philips Corp. 44 2300 2688
U.S. Secretary of the Army 990
U.S. Secretary of the Navy 2679 3347

Vitaliev, G. V. 986
Vychislitelny Tsentr Sibirskogo Otdelenia Akademii Nauk SSSR 984

Walker, R. L. 1588

Xerox Corp. 2013 2144 2425 2430 2677

LIST OF PERIODICALS ABSTRACTED

Many hundreds of periodicals are regularly scanned, but this list comprises only those from which material was abstracted in 1977. The primary purpose of the list is to facilitate identification of the sources of the abstracts. The titles are therefore listed alphabetically according to the form used in the abstracts; where this form is an abbreviation, it is followed by the full title. The addresses given are those from which copies of the periodicals may be obtained.

Trans. Database System. (ACM Transactions on Database ms). Association for Computing Machinery, 1133 Avenue of the icas, New York, NY 10036, U.S.A.

Trans. Math. Software. (ACM Transactions on Mathematical are). Association for Computing Machinery, 1133 Avenue of the icas, New York, NY 10036, U.S.A.

Technica Academiae Scientiarum Hungaricae. Kultura Foreign Co. for Books and Newspapers, 1389 Budapest, P.O.B. 149, ary.

Journal. American Institute of Aeronautics & Astronautics Inc., Avenue of the Americas, New York, NY 10019, U.S.A.

E Journal. American Institute of Chemical Engineers, 345 East 47 t, New York, NY 10017, U.S.A.

C Bulletin. Mrs J. M. Smith (Honorary Secretary, Association for ary and Linguistic Computing), c/o University of Manchester onal Computing Centre, Oxford Road, Manchester, M13 9PL.

tical Chemistry. American Chemical Society, 1155 16th Street, , Washington, DC 20036, U.S.A.

wandte Informatik. Friedr. Vieweg & Sohn Verlagsgesellschaft , 6200 Wiesbaden, Gustav-Stresemann-Ring 12–16, Germany.

ed Optics. American Institute of Physics, 335 East 45 Street, New , NY 10017, U.S.A.

wum Automatyki i Telemechaniki. Foreign Trade Enterprises Ars na-Ruch, 00–068 Warszawa, 7 Krakowskie Przedmiescie, P.O. Box Poland.

matika i Telemekhanika. Akademiya Nauk SSSR, Moscow, S.R.

System Technical J. (The Bell System Technical Journal). American phone and Telegraph Co., 195 Broadway, New York, NY 10007, A.

Data A/S, Kronprinsensgade 14, DK-1114, Copenhagen K, nark.

tin de Liason de la Recherche en Informatique et Automatique. tut de Recherche d'Informatique et d'Automatique, Domaine de ceau, Rocquencourt, 78150-Le Chesnay, France.

adian J. Chem. Engng. (The Canadian Journal of Chemical neering). The Canadian Society for Chemical Engineering, 151 r Street, Ottawa, Ontario K1P 5H3, Canada.

n. Engng. Science. (Chemical Engineering Science). Pergamon Press , Headington Hill Hall, Oxford, 0X3 0BW, or Pergamon Press Inc., well House, Fairview Park, Elmsford, NY 10523, U.S.A.

mun. ACM. (Communications of the ACM). Association for puting Machinery, 1133 Avenue of the Americas, New York, NY 6, U.S.A.

puter Bulletin. The British Computer Society, 29 Portland Place, don, W1N 4HU.

puter Design. Computer Design Publishing Corp., 11 Goldsmith et, Littleton, MA 01460, U.S.A.

puter J. (The Computer Journal). The British Computer Society, 29 land Place, London, W1N 4HU.

puters & Biomedical Research. Acamedic Press Inc., 111 Fifth nue, New York, NY 10003, U.S.A.

puters & the Humanities. Pergamon Press Inc., Maxwell House, view Park, Elmsford, NY 10523, U.S.A.

puting. Springer-Verlag, Molkerbastei 5, P.O. Box 367, A-1011 n, Austria (or, in North America, Springer-Verlag New York Inc., Fifth Avenue, New York, NY 10010, U.S.A.

puting Reviews. Association for Computing Machinery, 1133 nue of the Americas, New York, NY 10036, U.S.A.

genics. IPC Science & Technology Press Ltd., IPC House, 32 High et, Guilford, Surrey.

a Processing. IPC Business Press (Sales & Distribution) Ltd., field House, Perrymount Road, Haywards Heath, Sussex, RH16 I.

tal Processes. Georgi Publishing Company, CH 1813 St. Saphorin, zerland.

Economic Computation & Economic Cybernetics Studies & Research. The Centre of Economic Computation and Economic Cybernetics, Bucharest, Romania.

Electronic Applications Bulletin. N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands.

Elektronische Rechenanlagen. R. Oldenbourg Verlag GmbH, Rosenheimer Strasse 145, 8 Munchen 80, Germany.

Ergonomics. Taylor & Francis Ltd., Red Lion Court, Fleet Street, London, E.C.4.

Geophysics. Society of Exploration Geophysicists, P.O. Box 3098, Tulsa, Oklahoma 74101, U.S.A.

Human Factors. Johns Hopkins University Press, Baltimore, Maryland 21212, U.S.A.

IBM J. Res. & Dev. (IBM Journal of Research and Development). International Business Machines Corp., Armonk, NY 10504, U.S.A.

IBM Systems J. (IBM Systems Journal), International Business Machines Corp., Armonk, NY 10504, U.S.A.

IEEE J. Solid-State Circuits. (IEEE Journal of Solid-State Circuits). The Institute of Electrical and Electronics Engineers Inc., 345 East 47 Street, New York, NY 10017, U.S.A.

IEEE Trans. . . . (IEEE Transactions on . . .)
- **Acoustics, Speech & Signal Processing.**
- **Aerospace & Electronic Systems.**
- **Antennas & Propagation.**
- **Automatic Control.**
- **Biomedical Engineering.**
- **Broadcasting.**
- **Circuits & Systems.**
- **Computers.**
- **Education.**
- **Electromagnetic Compatability.**
- **Electron Devices.**
- **Geoscience Electronics.**
- **Industrial Electronics & Control Instrumentation.**
- **Industry Applications.**
- **Information Theory.**
- **Instrumentation & Measurement.**
- **Magnetics.**
- **Microwave Theory & Techniques.**
- **Parts, Hybrids & Packaging.**
- **Power Apparatus & Systems.**
- **Reliability.**
- **Software Engineering.**
- **Sonics & Ultrasonics.**
- **Systems, Man & Cybernetics.**
- **Vehicular Technology.**

The Institute of Electrical and Electronics Engineers Inc., 345 East 47 Street, New York, NY 10017, U.S.A.

Information & Control. Academic Press Inc., 111 Fifth Avenue, New York, NY 10003, U.S.A.

Information Processing in Japan. Information Processing Society of Japan, The Kikai Shinko-Kai Building, No. 3–5–8 Shiba-Koen, Minato-ku, Tokyo, Japan.

Int. Chem. Engng. (International Chemical Engineering). American Institute of Chemical Engineers, 345 East 47 Street, New York, NY 10017, U.S.A.

Israel J. Maths. (Israel Journal of Mathematics). Weizmann Science Press, P.O.B. 801, Jerusalem 91000, Israel.

J. Assn. Computing Mchy. (Journal of the Association for Computing Machinery). Association for Computing Machinery, 1133 Avenue of the Americas, New York, NY 10036, U.S.A.

J. Computational & Appld. Maths. (Journal of Computational and Applied Mathematics). Koninklijke Vlaamse Igenieursvereniging, Jan van Rijswijcklaan 58, B–2000 Antwerp, Belgium.

J. Computational Physics. (Journal of Computational Physics). Academic Press Inc., 111 Fifth Avenue , New York, NY 10003, U.S.A.
J. Computer & System Sciences. (Journal of Computer and System Sciences). Academic Press Inc., 111 Fifth Avenue, New York, NY 10003, U.S.A.
J. Franklin Inst. (Journal of the Franklin Institute). Pergamon Press Ltd., Headington Hill Hall, Oxford, OX3 0BW, or Pergamon Press Inc., Maxwell House, Faiview Park, Elmsford, NY 10523, U.S.A.
J. Nat. Chiao Tung University. (The Journal of National Chiao Tung University). Publication Office, College of Engineering, National Chiao Tung University, 45 Po Ai Street, Hsinchu 300, Taiwan, Republic of China.
Journal of Aircraft. American Institute of Aeronautics & Astronautics Inc., 1290 Avenue of the Americas, New York, NY 10019, U.S.A.

Maths. of Computation. (Mathematics of Computation). American Mathematical Society, P.O. Box 1571, Annex Station, Providence, Rhode Island 02901, U.S.A.
Maths. & Computers in Simulation. (Mathematics and Computers in Simulation). (Formerly 'Transactions of the International Association for Mathematics and Computers in Simulation). North-Holland Publishing Company, P.O. Box 211, 1000 AC Amsterdam, Netherlands, or 52 Vanderbilt Avenue, New York, NY 10017, U.S.A.
Medical & Biological Engng. & Computing. (Medical and Biological Engineering and Computing). Peter Peregrinus Ltd., P.O. Box 8, Southgate House, Stevenage, Herts, SG1 1HQ.

Nuclear Instruments & Methods. North-Holland Publishing Company, P.O. Box 211, Amsterdam, Netherlands.
Numerische Mathematik. Springer-Verlag, Heidelberger Platz 3, D–1000 Berlin 33, Germany (or, in North America, Springer-Verlag New York Inc., 175 Fifth Avenue, New York, NY 10010, U.S.A.).

Operational Research Quarterly. Pergamon Press Ltd., Headington Hill Hall, Oxford, OX3 0BW.
Operations Research. Operations Research Society of America, 428 East Preston Street, Baltimore, Maryland 21202, U.S.A.

Philips Research Reports. B. V. Uitgeversmaatschappij Centrex, Cederlaan 4, P.O. Box 76, Eindhoven, Netherlands.
Post Office Elec. Engrs. J. (The Post Office Electrical Engineers' Journal). 2–12 Gresham Street London, EC2V 7AG.

Proc. IEEE. (Proceedings of the IEEE). The Institute of Electrical and Electronics Engineers Inc., 345 East 47 Street, New York, NY 10017, U.S.A.
Proc. Instn. Elec. Engrs. (Proceedings of the Institution of Electrical Engineers). Publication Sales Department, Institution of Electrical Engineers, Station House, Nightingale Road, Hitchin, Herts, SG5 1RJ.

SIAM J. Computing. (SIAM Journal on Computing). Business Manager, SIAM Publications, 33 So. 17th Street, Philadelphia, Pennsylvania 19103, U.S.A.
SIAM J. Numerical Analysis. (SIAM Journal on Numerical Analysis). Business Manager, SIAM Publications, 33 So. 17th Stret, Philadelphia, Pennsylvania 19103, U.S.A.
Simulation. The Society for Computer Simulation, P O. Box 2228, La Jolla, California 92038, U.S.A.
Software— Practice & Experience. Periodicals Department, John Wiley & Sons Ltd., Baffins Lane, Chichester, Sussex.

Technica. Av. Rovisco Pais, I.S.T., Lisboa, Portugal.
Traffic Engng. & Control. (Traffic Engineering & Control). Printerhall Ltd., 29 Newman Street, London, W1P 3PE.
Trans. ASME Series A — J. Engng. for Power. (Transactions of the ASME Series A – Journal of Engineering for Power). American Society of Mechanical Engineers, 345 East 47 Street, New York, NY 10017, U.S.A.
Trans. ASME Series C— J. Heat Transfer. (Transactions of the ASME Series C – Journal of Heat Transfer). American Society of Mechanical Engineers, 345 East 47 Street, New York, NY 10017, U.S.A.
Trans. ASME Series E— J. Appld. Mechanics. (Transactions of the ASME Series E – Journal of Applied Mechanics). American Society of Mechanical Engineers, 345 East 47 Street, New York, NY 10017, U.S.A.
Trans. Instn. Chem. Engrs. (The Transactions of the Institution of Chemical Engineers). The Institution of Chemical Engineers, 16 Belgrave Square, London, S.W.1.
Trans. Int. Assn. Maths. & Computers in Simulation. (Transactions of the International Association for Mathematics and Computers in Simulation). Title changed, March 1977, to 'Mathematics and Computers in Simulation', *q.v.*

© Technical Information Company, 1978

Printed in Great Britain by Willmer Brothers Limited, Birkenhead, Merseyside